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27th July 1888 :—

- No. 4138.—Notifies that all Promissory Notes (or Stock Certificates issued in lieu thereof) of four-and-a-half per cent. loan of 1870 will be discharged at certain time and place

Home Department—Public.

12th November 1888 :—

- No. 2965.—Notifies the arrangements to be made for the reception of the Marquess of Lansdowne on his arrival to assume the office of Viceroy and Governor-General of India

3rd December 1888 :—

- No. 3067.—Notifies time of arrival of the Marquess of Lansdowne at Howrah Station

8th December 1888 :—

- No. 3119.—Announces the arrival of the Marquess of Lansdowne at Calcutta, and the assumption of office of Governor-General of India by him

10th December 1888 :—

- Proclaims the appointment of the Marquess of Lansdowne as Governor-General of India, &c.
No. 3131.—Directs that certain honours and distinctions should be continued to the Marquess of Dufferin during his stay in India
No. 3132.—Notifies the departure of the Marquess of Dufferin and Ava, and directs that certain honours shall be paid to him upon that occasion
No. 3133.—Notifies the departure of the Marquess of Dufferin and Ava from Howrah

Establishment.

17th November 1888 :—

- No. 427.—Notifies the appointment, &c., of the Hon'ble P. P. Hutchins, C.S.I., of Madras Civil Service, as an Ordinary Member of Council of Governor-General of India

22nd November 1888 :—

- No. 429.—Notifies appointment, &c., of Mr. D. M. Barbour, C.S.I., of Bengal Civil Service, as an Ordinary Member of Council of Governor-General of India

Military Secretary's Office.

6th December 1888 :—

- Notification regarding the reception of the Marquess of Lansdowne at Howrah and the route to be taken by his *Cortège*, &c.

8th December 1888 :—

- Notification regarding Entrée to Government House on the occasion of the arrival of the Marquess of Lansdowne

10th December 1888 :—

- Notification regarding Levée of His Excellency the Viceroy and Governor-General at Government House, Calcutta
Notification regarding Drawing Room of Their Excellencies the Viceroy and Marchioness of Lansdowne at Government House, Calcutta

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SUPPLEMENT TO
The Gazette of India.

No. 27.} CALCUTTA, SATURDAY, JULY 7, 1888.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.

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Upper Sind Frontier	14 0	14 0	7 0	7 0	13 0	13 54	17 0	19 0	16 0	18 9	21 0	24 0	13 0	14 0	14 0	16 0	10 14	10 14	135 5	213 5	11 0	11 0
Karachi	12 4	12 0	7 0	7 0	13 0	13 54	17 0	19 0	16 0	18 9	21 0	24 0	13 0	14 0	14 0	16 0	10 14	10 14	135 5	213 5	11 0	11 0
Hyderabad (Gidu Bandar)	12 8	12 0	7 0	7 0	13 0	13 54	17 0	19 0	16 0	18 9	21 0	24 0	13 0	14 0	14 0	16 0	10 14	10 14	135 5	213 5	11 0	11 0
Shikarpur	12 8	12 0	7 0	7 0	13 0	13 54	17 0	19 0	16 0	18 9	21 0	24 0	13 0	14 0	14 0	16 0	10 14	10 14	135 5	213 5	11 0	11 0
Sukkur	16 0	16 0	7 0	7 0	13 0	13 54	17 0	19 0	16 0	18 9	21 0	24 0	13 0	14 0	14 0	16 0	10 14	10 14	135 5	213 5	11 0	11 0
Thar & Parkar (Umarkot)	15 0	13 0	7 0	7 0	13 0	13 54	17 0	19 0	16 0	18 9	21 0	24 0	13 0	14 0	14 0	16 0	10 14	10 14	135 5	213 5	11 0	11 0
BENGAL.																						
Western Districts.																						
Burdwan	14 8	16 0	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Bankura	13 8	15 0	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Berhampur	15 12	15 12	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Midnapore	13 5	16 0	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Hoochly	14 0	14 0	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Howrah	14 0	14 0	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Central Districts.																						
Calcutta	13 6	13 10	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
24-Fergunnahs	14 0	16 0	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Nuddea	16 6	16 6	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Khoolna	16 0	16 0	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Jessore	15 0	16 0	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Moorsheadabad	15 4	16 0	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Dinapore	18 0	18 0	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Rajshahye	20 0	17 8	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Rungpore	18 0	17 8	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Bogra	15 12	15 0	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Fulna	18 12	18 12	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Darjeeling	10 0	10 0	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Jalpaiguri	13 0	13 0	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Eastern Districts.																						
Dacca	19 0	19 0	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Furzedpore	24 0	24 0	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Backergunge	12 0	12 0	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Mymensingh	11 8	11 8	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Chittagong	11 8	11 8	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	
Noakholly	11 8	11 8	17 4	18 0	22 8	23 4	25 0	25 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	

- a In sub-divisions retail prices of salt per rupee were:—Culna 10-11 sers, Cutwa 10-11 sers, and Raneeunge 10-4 sers.
 b At Rampore Haut retail price of salt 11-4 sers per rupee.
 c In sub-divisions retail prices of salt per rupee were:—Ghatil 11 sers, Tumlook 8 sers, and Contai 10 sers.
 d In sub-divisions retail prices of salt per rupee were:—Seranpore 10 sers and Jahanabad 10-5 sers.
 e In sub-divisions retail prices of salt per rupee were:—Baraset, Bassinhat, and Diamond Harbour (Kulphilat) 9 sers; Barrackpore 9-2 sers, and Dum-Dum 10 sers.
 f In sub-divisions retail prices of salt per rupee were:—Koochitea and Ranaghat 10 sers, and Mehrpore and Chooa-danga 10-8 sers.
 g In Sakthira sub-division retail price of salt 9 sers 24 chittacks per rupee.
 h In sub-divisions retail prices of salt per rupee were:—Jhenidah and Magura 9 sers, Narail 7½ sers, and Bongong 10 sers.
 i In sub-divisions retail prices of salt per rupee were:—Lalbagh to sers and Jungipore 10-8 sers.
- † Not procurable.
 ‡ Not available.
 § No sale.

RETAIL PRICES FOR THE 1st HALF OF JUNE 1888—continued.

DISTRICTS.	QUANTITIES PER RUPEE IN SEERS OF 80 TOLAS.																													
	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLAM (Sorghum vulgare).		BAJRA OR CUMBU (Pennisetum typhoides).		MARUA OR RAGI (Eleusine coracana).		KANGNI OR KARUN, ITALIAN MILLET (Setaria italica).		GRAM, CHENNA, CHOLA, KADALAY OR SUNAGA (Cicer arietinum).		MAIZE (Zea Mays).		ARHAR OR TUR CADIAN (Cajanus indicus).		FIREWOOD.		SALT.					
	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.				
BENGAL—continued.																														
Eastern Districts—continued.																														
Tipperah	12 8	12 8	...	...	17 8	17 8	22 0	22 0	...	...	...	...	...	...	...	...	...	14 4	14 4	...	...	10 0	10 0	...	...	...	...	8 0	8 0
Chittagong Hill Tracts	...	...	...	...	13 14	13 5	15 4	15 4	...	...	...	...	...	...	...	...	...	12 0	13 0	...	...	...	...	320 0	...	...	...	8 0	...
Hill Tipperah	8 0	8 0	...	...	10 0	10 0	22 0	22 0	...	...	...	...	...	...	...	...	...	...	...	...	...	12 0	12 0	...	...	...	...	9 0	9 0
Behar.																														
Patna	10 0	19 0	28 0	28 0	11 8	11 8	20 0	20 0	18 0	...	...	...	...	...	...	...	...	28 0	29 0	...	...	28 0	29 0	110 0	120 0	...	...	9 8	9 12
Gya	17 0	17 0	24 0	25 0	11 0	10 0	16 0	16 0	...	...	...	...	...	...	...	...	...	23 8	23 8	...	...	15 0	14 0	150 0	140 0	...	...	9 8	9 8
Shahabad	17 0	17 0	25 0	25 0	10 0	9 0	16 0	18 0	...	...	...	...	...	...	...	...	...	25 4	25 8	...	...	15 0	14 0	150 0	140 0	...	...	9 8	9 8
Darbhanga	16 8	16 8	30 0	31 0	13 0	13 8	19 0	20 0	...	...	...	...	...	...	...	...	...	30 0	30 8	...	...	24 0	25 0	160 0	160 0	...	...	10 0	10 0
Muzaffarpore	16 0	16 0	30 0	31 0	12 0	12 0	18 0	18 0	...	...	...	...	...	...	...	...	...	30 0	30 8	...	...	27 0	27 8	160 0	160 0	...	...	10 0	10 0
Saran	17 0	17 0	24 8	25 8	9 8	9 8	19 4	19 12	...	...	...	...	...	...	...	...	...	24 8	24 8	...	...	27 0	27 4	160 0	160 0	...	...	10 0	10 0
Chhapra	17 0	17 0	30 0	30 0	8 0	9 0	17 0	16 8	...	...	...	...	...	...	...	...	...	30 0	33 8	...	...	28 0	29 8	160 0	160 0	...	...	9 8	9 0
Monghyr	17 12	17 12	27 15	33 9	13 10	14 15	15 12	16 12	15 12	...	...	...	...	...	...	...	...	20 4	21 8	...	...	21 0	23 4	126 0	126 0	...	...	9 8	9 0
Bhagalpur	18 4	18 4	25 4	26 8	15 2	15 2	17 10	17 10	...	...	...	...	...	...	...	...	...	20 4	21 8	...	...	24 0	25 4	151 8	151 8	...	...	10 1	10 1
Purneah	20 0	18 0	29 0	...	19 0	19 0	20 0	21 0	...	...	...	...	...	...	...	...	...	35 0	31 0	...	...	24 0	25 4	120 0	120 0	...	...	8 8	8 8
Malda	28 0	18 0	...	...	14 0	14 0	20 0	21 0	...	...	...	...	...	...	...	...	...	...	...	...	...	21 0	14 0	120 0	120 0	...	...	9 8	9 8
Sonthal Pergunahs	13 8	13 0	...	...	10 8	16 0	20 0	20 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	200 0	200 0	...	...	10 0	9 0
Orissa.																														
Cuttack	10 8	10 8	...	...	11 13	11 13	19 11	18 6	...	...	...	...	...	...	...	...	...	18 6	19 11	...	...	15 12	15 12	80 0	80 0	...	...	9 0	10 0
Pooree	13 2	14 7	...	...	11 13	13 2	21 0	21 0	...	...	...	...	...	...	...	...	...	18 6	18 6	...	...	15 12	15 12	80 0	80 0	...	...	10 8	10 8
Balasore	15 0	15 0	13 0	13 0	13 0	14 0	26 0	27 0	...	...	...	...	...	...	...	...	...	10 0	10 6	...	...	13 0	11 8	200 0	200 0	...	...	9 8	9 8
CHOTA NAGPORE.																														
South-Western Frontier Agency.																														
Hazaribagh	13 0	15 0	17 0	19 0	8 0	8 0	14 0	15 0	...	...	...	...	...	...	...	...	...	25 0	25 0	...	...	19 0	18 0	280 0	320 0	...	...	8 0	8 0
Lohardugga	12 0	13 0	...	...	15 0	15 0	18 0	18 0	...	...	...	...	...	...	...	...	...	...	...	...	18 0	22 0	22 0	140 0	140 0	...	...	8 0	8 0
Singbhum.	12 0	14 0	16 0	16 0	12 0	16 0	20 0	20 0	240 0	240 0	240 0	240 0	6 8	6 0
Manbhum.	13 5	13 0	24 0	14 0	21 0	21 0	22 0	22 8	200 0	240 0	8 0	8 0
ASSAM.																														
Silhet	13 4	13 4	14 0	14 0	22 5	21 14	12 0	12 4	108 0	108 0	9 0	9 4
Cachar	10 0	9 12	12 0	12 5	20 0	16 0	11 0	11 0	80 0	80 0	9 0	9 6
Goalpara	20 0	20 0	8 0	8 0	18 0	18 0	11 0	11 0	160 0	160 0	9 0	9 0
Garo Hills	8 0	8 0	6 0	6 0	18 0	18 0	9 0	9 0	160 0	160 0	8 0	8 0
Kamrup	20 0	20 0	8 0	8 0	20 0	21 0	10 0	10 0	160 0	160 0	9 0	9 0
Darrang	7 0	7 0	12 8	12 8	16 0	16 0	9 0	9 0	150 0	150 0	8 0	8 0

[illegible]

* Return not received.

‡ Not procurable.

§ In sub-divisions retail prices of salt per rupee were :—Buxar 10 sers, Bhabuah 7 sers, and Sasseram 9 sers.

¶ In Madhubani and Taprore sub-divisions retail prices of salt 10 sers per rupee.

‡ In Hajipur retail price of salt 9-8 sers per rupee.

§ In Bettiah retail price of salt 9 sers per rupee.

¶ In sub-divisions retail prices of salt per rupee were :—Begusarai 9 sers and Jamui 9-4 sers.

‡ Not available.

§ In sub-divisions retail prices of salt per rupee were :—Kishengunge 9 sers and Arraresh (at Raingunge) 8-12 sers.

¶ In Khordah sub-division retail price of salt 8 sers per rupee.

‡ At Bhadrak retail price of salt 8 sers per rupee.

§ At Daltengunge retail price of salt 8-13 sers per rupee.

¶ At Govindpur retail price of salt 9 sers per rupee.

RETAIL PRICES FOR THE 1st HALF OF JUNE 1888—continued.

QUANTITIES PER RUPEE IN SEER OF 80 TOLAS.																												
DISTRICTS.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLU (<i>Sorghum vulgare</i>).		BAJRA OR CUMBU (<i>Pennisetum hypoleidum</i>).		MAHUA OR RAGI (<i>Zizania caroliniana</i>).		KANGNI OR KAKUN, ITALIAN MILLET (<i>Setaria italica</i>).		GRAM, CHOLA, KADALAY OR SUNAGA (<i>Cicer arietinum</i>).		MAIZE (<i>Zea Mays</i>).		ARHAR OR TUR (<i>Cajanus indicus</i>).		FIREWOOD.		SALT.			
	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past		
	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.		
PUNJAB.																												
Hissar	18 0	17 0	26 0	26 0	10 0	10 0	23 0	23 0	21 0	20 0	22 0	22 0	19 0	19 0	26 0	27 0	20 0	20 0	17 0	17 0	120 0	100 0	10 8	11 0	120 0	120 0	10 8	11 0
Rohat	17 0	17 0	26 0	26 0	11 0	11 0	22 0	22 0	18 0	18 0	22 0	22 0	18 0	18 0	25 0	26 0	16 0	16 0	16 0	16 0	130 0	120 0	11 0	11 0	130 0	130 0	11 0	11 0
Gurgaon	17 0	17 0	24 0	24 0	12 0	12 0	24 0	24 0	19 0	19 0	23 0	23 0	19 0	19 0	25 0	26 0	17 0	17 0	17 0	17 0	140 0	140 0	12 0	12 0	150 0	150 0	12 0	12 0
Delhi	18 0	18 0	28 0	28 0	12 0	12 0	29 0	29 0	21 0	21 0	11 0	11 0	16 0	16 0	8 0	8 0	13 0	13 0	13 0	13 0	100 0	100 0	10 0	10 0	140 0	140 0	8 0	8 0
Karnal	18 0	17 0	25 0	25 0	10 0	10 0	22 0	22 0	13 0	13 0	9 0	9 0	10 0	10 0	8 0	8 0	13 0	13 0	14 0	14 0	120 0	120 0	10 0	10 0	130 0	130 0	10 0	10 0
Unbela	14 0	12 0	17 0	17 0	10 0	10 0	12 0	12 0	9 0	9 0	10 0	10 0	20 0	20 0	13 0	13 0	14 0	14 0	20 0	20 0	110 0	110 0	12 0	12 0	120 0	120 0	12 0	12 0
Simla	14 0	14 0	17 0	17 0	8 0	8 0	16 0	16 0	18 0	18 0	10 0	10 0	13 0	13 0	14 0	14 0	20 0	22 0	22 0	22 0	110 0	110 0	12 0	12 0	120 0	120 0	12 0	12 0
Kangra	19 0	19 0	24 0	24 0	11 0	11 0	19 0	19 0	16 0	16 0	10 0	10 0	17 0	17 0	18 0	18 0	18 0	18 0	21 0	21 0	130 0	130 0	12 0	12 0	160 0	160 0	12 0	12 0
Hoshiarpur	19 0	19 0	26 0	26 0	12 0	12 0	20 0	20 0	16 0	16 0	11 0	11 0	18 0	18 0	19 0	19 0	19 0	19 0	25 0	25 0	130 0	130 0	12 0	12 0	160 0	160 0	12 0	12 0
Jullundur	20 0	20 0	27 0	27 0	12 0	12 0	21 0	21 0	16 0	16 0	11 0	11 0	18 0	18 0	19 0	19 0	19 0	19 0	24 0	24 0	130 0	130 0	12 0	12 0	160 0	160 0	12 0	12 0
Ludhiana	19 0	19 0	27 0	27 0	10 0	10 0	19 0	19 0	16 0	16 0	10 0	10 0	17 0	17 0	18 0	18 0	18 0	18 0	21 0	21 0	130 0	130 0	12 0	12 0	160 0	160 0	12 0	12 0
Ferozepur	15 0	15 0	22 0	22 0	10 0	10 0	14 0	14 0	15 0	15 0	15 0	15 0	15 0	15 0	16 0	16 0	16 0	16 0	20 0	20 0	105 0	105 0	10 0	10 0	150 0	150 0	10 0	10 0
Mooltan	17 0	17 0	23 0	23 0	10 0	10 0	16 0	16 0	16 0	16 0	15 0	15 0	15 0	15 0	16 0	16 0	16 0	16 0	14 0	14 0	105 0	105 0	10 0	10 0	150 0	150 0	10 0	10 0
Thang	17 0	17 0	24 0	24 0	10 0	10 0	17 0	17 0	18 0	18 0	16 0	16 0	16 0	16 0	17 0	17 0	17 0	17 0	19 0	19 0	120 0	120 0	12 0	12 0	160 0	160 0	12 0	12 0
Montgomery	18 0	18 0	24 0	24 0	10 0	10 0	17 0	17 0	18 0	18 0	16 0	16 0	16 0	16 0	17 0	17 0	17 0	17 0	19 0	19 0	120 0	120 0	12 0	12 0	160 0	160 0	12 0	12 0
Lahore	18 0	18 0	25 0	25 0	10 0	10 0	17 0	17 0	18 0	18 0	16 0	16 0	16 0	16 0	17 0	17 0	17 0	17 0	19 0	19 0	120 0	120 0	12 0	12 0	160 0	160 0	12 0	12 0
Amritsar	20 0	20 0	28 0	28 0	13 0	13 0	18 0	18 0	15 0	15 0	15 0	15 0	15 0	15 0	16 0	16 0	16 0	16 0	20 0	20 0	130 0	130 0	13 0	13 0	160 0	160 0	13 0	13 0
Gurdaspur	18 0	19 0	25 0	25 0	10 0	10 0	16 0	16 0	16 0	16 0	15 0	15 0	15 0	15 0	16 0	16 0	16 0	16 0	19 0	19 0	130 0	130 0	13 0	13 0	160 0	160 0	13 0	13 0
Sialkot	18 0	18 0	23 0	23 0	9 0	9 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	16 0	16 0	16 0	16 0	19 0	19 0	130 0	130 0	13 0	13 0	160 0	160 0	13 0	13 0
Guirat	18 0	18 0	23 0	23 0	9 0	9 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	16 0	16 0	16 0	16 0	19 0	19 0	130 0	130 0	13 0	13 0	160 0	160 0	13 0	13 0
Gufranwala	17 0	16 0	24 0	24 0	10 0	10 0	14 0	14 0	14 0	14 0	15 0	15 0	15 0	15 0	16 0	16 0	16 0	16 0	19 0	19 0	150 0	150 0	14 0	14 0	160 0	160 0	14 0	14 0
Shabpur	15 0	15 0	21 0	21 0	11 0	11 0	17 0	17 0	17 0	17 0	13 0	13 0	13 0	13 0	14 0	14 0	14 0	14 0	15 0	15 0	90 0	90 0	13 0	13 0	110 0	110 0	13 0	13 0
Jhelum	17 0	16 0	21 0	21 0	12 0	12 0	16 0	16 0	16 0	16 0	13 0	13 0	13 0	13 0	14 0	14 0	14 0	14 0	15 0	15 0	100 0	100 0	11 0	11 0	120 0	120 0	11 0	11 0
Rawalpindi	16 0	16 0	22 0	22 0	12 0	12 0	16 0	16 0	16 0	16 0	13 0	13 0	13 0	13 0	14 0	14 0	14 0	14 0	15 0	15 0	110 0	110 0	11 0	11 0	120 0	120 0	11 0	11 0
Hazara	16 0	16 0	23 0	23 0	10 0	10 0	16 0	16 0	16 0	16 0	13 0	13 0	13 0	13 0	14 0	14 0	14 0	14 0	15 0	15 0	110 0	110 0	11 0	11 0	120 0	120 0	11 0	11 0
Peshawar	15 0	15 0	23 0	23 0	11 0	11 0	16 0	16 0	16 0	16 0	13 0	13 0	13 0	13 0	14 0	14 0	14 0	14 0	15 0	15 0	110 0	110 0	11 0	11 0	120 0	120 0	11 0	11 0
Kohat	14 0	14 0	23 0	23 0	9 0	9 0	15 0	15 0	15 0	15 0	13 0	13 0	13 0	13 0	14 0	14 0	14 0	14 0	15 0	15 0	110 0	110 0	11 0	11 0	120 0	120 0	11 0	11 0
Bannu	16 0	16 0	23 0	23 0	9 0	9 0	15 0	15 0	15 0	15 0	13 0	13 0	13 0	13 0	14 0	14 0	14 0	14 0	15 0	15 0	110 0	110 0	11 0	11 0	120 0	120 0	11 0	11 0
D. I. Khan	14 0	14 0	22 0	22 0	9 0	9 0	15 0	15 0	15 0	15 0	13 0	13 0	13 0	13 0	14 0	14 0	14 0	14 0	15 0	15 0	110 0	110 0	11 0	11 0	120 0	120 0	11 0	11 0
D. G. Khan	17 0	17 0	21 0	21 0	12 0	12 0	16 0	16 0	16 0	16 0	13 0	13 0	13 0	13 0	14 0	14 0	14 0	14 0	15 0	15 0	110 0	110 0	11 0	11 0	120 0	120 0	11 0	11 0
Muzaffargarh	17 0	16 0	22 0	22 0	12 0	12 0	16 0	16 0	16 0	16 0	13 0	13 0	13 0	13 0	14 0	14 0	14 0	14 0	15 0	15 0	110 0	110 0	11 0	11 0	120 0	120 0	11 0	11 0
CENTRAL PROVINCES.																												
Saugor	16 0	16 0	22 0	22 0	8 10	8 10	10 15	10 15	15 0	15 0	10 15	10 15	10 15	10 15	15 0	15 0	15 0	15 0	17 0	17 0	170 0	170 0	8 8	8 8	120 0	120 0	8 8	8 8
Danore	21 0	21 0	24 0	24 0	10 10	10 10	12 10	12 10	15 0	15 0	10 10	10 10	10 10	10 10	15 0	15 0	15 0	15 0	17 0	17 0	200 0	200 0	8 8	8 8	120 0	120 0	8 8	8 8
Jabalpore	17 0	17 0	24 0	24 0	10 10	10 10	12 10	12 10	15 0	15 0	10 10	10 10	10 10	10 10	15 0	15 0	15 0	15 0	17 0	17 0	200 0	200 0	8 8	8 8	120 0	120 0	8 8	8 8
Meerha	27 0	27 0	28 0	28 0	10 10	10 10	12 10	12 10	15 0	15 0	10 10	10 10	10 10	10 10	15 0	15 0	15 0	15 0	17 0	17 0	200 0	200 0	8 8	8 8	120 0	120 0	8 8	8 8
Seoni	20 0	20 0	27 0	27 0	11 0	11 0	13 0	13 0	15 0	15 0	10 10	10 10	10 10	10 10	15 0	15 0	15 0	15 0	17 0	17 0	200 0	200 0	8 8	8 8	120 0	120 0	8 8	8 8
Narsinghpur	16 0	16 0	21 0	21 0	9 0	9 0	11 0	11 0	13 0	13 0	9 0	9 0	9 0	9 0	11 0	11 0	11 0	11 0	13 0	13 0	160 0	160 0	8 8	8 8	120 0	120 0	8 8	8 8
Hoshangabad	15 0	15 0	20 0	20 0	9 0	9 0	11 0	11 0	13 0	13 0	9 0	9 0	9 0	9 0	11 0	11 0	11 0	11 0	13 0	13 0	160 0	160 0	8 8	8 8	120 0	120 0	8 8	8 8
Nimar	14 0	14 0	20 0	20 0	9 0	9 0	11 0	11 0	13 0	13 0	9 0	9 0	9 0	9 0	11 0	11 0	11 0	11 0	13 0	13 0	160 0	160 0	8 8	8 8	120 0	120 0	8 8	8 8
Asirgarh Cantonment	15 0	15 0	20 0	20 0	9 0	9 0	11 0	11 0	13 0	13 0	9 0																	

RETAIL PRICES FOR THE 1st HALF OF JUNE 1888—concluded.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.																											
DISTRICTS.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLU (Sorghum vulgare).		BAJRA OR CUMBU (Pennisetum typhoides).		MARUA OR RAGI (Eleusine indica).		KANGNI OR KANUN ITALIAN MILLET (Setaria italica).		GRAM, CHENNA, KADALAY, OR SUNAGA (Cicer arietinum).		MAIZE (Zea Mays).		ARHAR OR THE CADJAN PEA (Cajanus indicus).		FIREWOOD.		SALT.		
	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	
	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
RAJPUTANA.																											
Jeypore	15 8	15 4	22 8	22 4	5 0	5 0	9 0	9 0	19 0	19 0	14 0	14 0	13 8	13 8	21 0	23 8	125 c	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0
Kishengurh	14 0	13 12	18 12	19 4	9 0	9 0	10 0	10 0	15 4	17 0	14 0	15 0	25 0	23 0	14 8	37 8	200 0	13 0	13 0	13 0	13 0	13 0	13 0	13 0	13 0	13 0	13 0
Kerowlee	17 8	16 6	23 2	23 12	11 4	11 4	11 4	11 4	21 8	20 8	15 0	15 0	14 11	15 0	17 8	17 8	200 0	10 10	10 10	10 10	10 10	10 10	10 10	10 10	10 10	10 10	10 10
Uwar	18 10	18 14	24 10	24 12	8 0	8 0	11 0	11 0	21 8	20 8	15 0	15 0	14 11	15 0	17 8	17 8	200 0	12 4	12 4	12 4	12 4	12 4	12 4	12 4	12 4	12 4	12 4
Bharipore (City)	16 9	17 0	23 11	26 1	7 10	7 10	8 4	8 4	19 8	19 8	15 10	15 10	11 0	11 0	18 0	18 0	260 0	11 8	11 8	11 8	11 8	11 8	11 8	11 8	11 8	11 8	11 8
Ainmere	12 8	13 0	18 0	18 0	3 0	3 0	8 0	8 0	16 0	16 0	14 0	15 0	22 0	22 0	14 0	15 0	220 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0
Dooli Cantonment	16 5	16 0	22 9	22 2	4 8	4 8	9 0	9 0	17 8	17 8	15 12	15 12	25 0	25 0	15 8	15 8	240 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0
Erinpura	13 2	13 2	20 2	20 2	6 8	6 8	8 4	8 4	18 0	18 0	16 0	17 0	25 0	25 0	15 8	15 8	160 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0
Sirohee	12 8	12 8	21 0	21 0	6 8	6 8	8 4	8 4	18 0	18 0	16 0	17 0	25 0	25 0	15 8	15 8	160 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0
Abu	11 0	11 0	16 0	16 0	6 12	6 12	8 4	8 4	18 0	18 0	16 0	17 0	25 0	25 0	15 8	15 8	160 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0
Anadira	12 0	12 0	18 0	18 0	6 12	6 12	8 4	8 4	18 0	18 0	16 0	17 0	25 0	25 0	15 8	15 8	160 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0
Balmere	10 8	10 8	16 0	16 0	6 12	6 12	8 4	8 4	18 0	18 0	16 0	17 0	25 0	25 0	15 8	15 8	160 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0
Jeysulmere	11 4	11 0	16 0	16 0	6 12	6 12	8 4	8 4	18 0	18 0	16 0	17 0	25 0	25 0	15 8	15 8	160 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0
Hilly Tracts of Meywar	15 0	15 0	21 0	21 0	6 12	6 12	8 4	8 4	18 0	18 0	16 0	17 0	25 0	25 0	15 8	15 8	160 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0
Meywar (Odeypore)	13 4	13 4	17 0	17 3	9 6	9 6	10 8	10 8	13 0	13 0	11 12	11 12	14 1	14 1	20 0	20 0	260 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0
Banswara (Meywar Agency)	18 12	18 12	20 0	20 0	7 8	7 8	13 2	13 2	12 8	12 8	11 12	11 12	14 1	14 1	20 0	20 0	260 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0
Parbhargh (Meywar Agency)	14 6	15 0	18 12	20 0	8 12	8 12	13 2	13 2	12 8	12 8	11 12	11 12	14 1	14 1	20 0	20 0	260 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0
Mewar (Jodhpore)	12 3	12 3	16 0	17 3	6 4	6 4	7 8	7 8	15 0	15 0	13 0	13 0	11 12	11 12	14 1	14 1	20 0	10 2	10 2	10 2	10 2	10 2	10 2	10 2	10 2	10 2	10 2
Bikaner	10 8	10 10	16 0	17 3	6 4	6 4	7 8	7 8	15 0	15 0	13 0	13 0	11 12	11 12	14 1	14 1	20 0	10 2	10 2	10 2	10 2	10 2	10 2	10 2	10 2	10 2	10 2
Bondlee	17 0	18 4	23 0	24 8	10 8	10 8	11 0	11 0	19 0	20 4	12 0	12 0	11 10	11 10	13 9	13 9	110 0	7 4	7 4	7 4	7 4	7 4	7 4	7 4	7 4	7 4	7 4
Kotah	14 8	15 0	16 0	16 0	7 8	7 8	10 0	10 0	17 0	18 0	12 0	12 0	11 10	11 10	13 9	13 9	110 0	7 4	7 4	7 4	7 4	7 4	7 4	7 4	7 4	7 4	7 4
Tonk	16 4	15 6	22 4	23 1	9 8	9 8	10 0	10 0	17 0	18 0	12 0	12 0	11 10	11 10	13 9	13 9	110 0	7 4	7 4	7 4	7 4	7 4	7 4	7 4	7 4	7 4	7 4
Ballahwa	13 6	13 6	15 11	15 15	7 5	7 5	9 6	9 6	15 4	15 6	10 10	11 5	8 14	8 14	15 11	15 11	100 0	16 8	16 8	16 8	16 8	16 8	16 8	16 8	16 8	16 8	16 8
Shahpoora	16 0	16 0	19 9	19 12	9 0	9 0	12 0	12 0	18 4	18 4	13 0	15 0	8 14	8 14	15 11	15 11	100 0	16 8	16 8	16 8	16 8	16 8	16 8	16 8	16 8	16 8	16 8
Dholpur	17 7	17 1	25 7	26 0	11 4	11 4	12 6	12 6	17 14	18 0	14 8	15 8	18 0	18 0	24 5	24 5	90 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0
Nusserebad Cantonment	14 4	14 2	18 12	18 10	7 0	7 0	8 0	8 0	17 0	16 11	14 8	15 8	12 0	12 0	19 14	19 10	90 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0
CENTRAL INDIA.																											
Indore	13 8	13 8	17 0	17 0	8 8	8 8	10 0	10 0	14 8	15 0	15 0	16 0	17 8	17 8	17 13	17 13	120 0	15 8	15 8	15 8	15 8	15 8	15 8	15 8	15 8	15 8	15 8
Gwalior	12 15	12 11	17 14	18 2	7 4	7 4	9 1	9 1	13 14	14 6	12 3	12 3	9 1	9 1	17 8	17 8	135 15	10 0	10 0	10 0	10 0	10 0	10 0	10 0	10 0	10 0	10 0
Gooma	16 0	16 0	20 0	20 0	9 0	9 0	10 0	10 0	14 6	15 0	12 3	12 3	9 1	9 1	17 8	17 8	135 15	10 0	10 0	10 0	10 0	10 0	10 0	10 0	10 0	10 0	10 0
Baghelkhand (Sitwa)	21 4	21 0	28 0	27 14	8 0	8 0	15 8	15 8	20 0	20 0	14 0	14 0	12 0	12 0	20 0	20 0	180 0	11 8	11 8	11 8	11 8	11 8	11 8	11 8	11 8	11 8	11 8
Nemuch Cantonment	12 8	12 0	18 8	18 0	8 0	8 0	10 0	10 0	15 4	16 0	14 0	14 8	12 0	12 0	19 14	19 10	180 0	11 8	11 8	11 8	11 8	11 8	11 8	11 8	11 8	11 8	11 8
BALUCHISTAN.																											
Quetta	10 6	10 8	13 8	13 2	5 0	5 0	7 8	7 8	16 12	16 12	14 0	14 8	12 0	12 0	18 0	18 0	80 0	9 0	9 0	9 0	9 0	9 0	9 0	9 0	9 0	9 0	9 0
AJEN.																											
Quetta	8 0	8 0	10 3	10 3	6 3	6 3	8 0	8 0	16 3	16 3	9 4	9 4	12 0	12 0	18 0	18 0	65 5	32 0	32 0	32 0	32 0	32 0	32 0	32 0	32 0	32 0	32 0

* Nine pies per bundle.

† Not sold.

‡ Seven and a half pies per bundle.

DEPARTMENT OF FINANCE AND COMMERCE,

(Statistical Branch).

E. J. SINKINSON,

Offg. Secretary to the Government of India.

GOVERNMENT OF INDIA.
REVENUE AND AGRICULTURAL DEPARTMENT.

Circular No. $\frac{618.}{81-2}$

Extract from the Proceedings of the Government of India in the Revenue and Agricultural Department (Surveys),—dated Simla, the 26th June 1888.

Read—

The General Report on the Operations of the Survey of India Department for the year 1886-87.

R E S O L U T I O N.

The administration of the Department remained in the hands of Colonel H. R. Thuillier, R.E., who was confirmed in the appointment of Surveyor-General on the death of Colonel G. C. DePree in February 1887. The Revenue and Trigonometrical Branches continued to be under the superintendence, respectively, of Colonel J. Sconce, S.C., and Colonel C. T. Haig, R.E.

Number of parties.

2. The various operations were carried on by 25 different parties.

3. One party continued the secondary triangulation on the Coromandel Coast, carrying the chain of triangles from Madras to a distance of 170 miles, a little beyond Nellore. Owing to bad weather and sickness, the party did not succeed in continuing the triangulation northwards so as to unite with the operations of the previous year. A gap of 80 miles was thus left over for the following season.

Secondary coast triangulation.

4. The number of topographical survey parties was reduced from ten in 1885-86 to eight in the year under report, the Cutch and Deccan parties having been transferred to the Central Provinces to take up the traverse surveys of districts coming under revision of settlement. Two out of the eight parties were employed partly on topographical and partly on Forest surveys in Bombay. A topographical section was, however, added to the cadastral party in Burma with the view of completing the topography of hill ranges in the Akyab district; and the Punjab traverse party also made some original surveys of portions of Native States. The two parties in Bombay, one party in Baluchistan, one in the Mirzapur district, North-Western Provinces, and one in the Himalayas, were employed in continuation of the operations of the preceding year. A second party was sent (from Rajputana) to Baluchistan to aid in the general survey of that country and for special survey work on the frontier required by the Military authorities. Another party was transferred to Madras from Mysore, and it took up the survey of the Madura and Tinnevely districts. The area remaining to be topographically surveyed in that Presidency was, on the suggestion of the Government of India, made over to the Imperial Survey Department, with the view of accelerating the completion of revenue surveys in Madras by the local Survey Department. The eighth topographical party made a survey of the Nicobar Islands, mainly with the object of meeting the requirements of navigation. A portion of the coast of the Little Andaman Island was also surveyed at the request of the Chief Commissioner of Port Blair.

The aggregate area topographically surveyed on various scales by all the parties amounted to 17,510 square miles, as compared with an outturn of 19,162 square miles surveyed in 1885-86 by ten parties.

Native soldiers were attached to the two Baluchistan, the Mirzapur, and the Himalaya parties for training in survey work.

A

It may be explained that the reduction in the number of topographical survey parties to meet demands for revenue surveys is due to the fact that the latter class of work cannot be postponed without entailing loss of State revenues, whereas topographical surveys, however useful, may be postponed without serious detriment to the administration.

5. The Forest surveys in Bombay were, as already mentioned, carried on by sections of two topographical survey parties. The areas surveyed lie partly in

Forest surveys.

the Belgaum District, Southern Circle, and partly in the Tháná district, Northern Circle. In the Southern Circle the work comprises the preparation of a skeleton map showing the survey of Forest boundaries, any details that are considered necessary being filled in afterwards by the Forest Department, whereas in the Northern Circle the Forest reserves have to be surveyed in full detail.

Two small forests in the Gorakhpur district, North-Western Provinces, were surveyed by the cadastral survey party employed there.

The Forest survey party in Burma was unable to continue its work in the Prome district on account of the unsettled state of that part of the country. Two European surveyors and a few sub-surveyors were sent to Upper Burma, and the remainder of the party was transferred to the Zamayi Forests, Pegu district, where preliminary triangulation and traversing constituted the chief work. The outturn of final survey was very small.

6. Five out of six cadastral survey parties continued with little change the operations of previous years. They were employed in (1) the Bilaspur and

Cadastral surveys.

Raipur districts, Central Provinces; (2) in the Basti, and (3) the Gorakhpur and Tarai, districts of the North-Western Provinces; (4) in the Darrang and Nowgong districts, Assam; and (5) in the Akyab, Bassein, and Thongwa districts, Burma. The sixth party was divided into three sections, two of which were engaged in Bengal, on the cadastral survey respectively, of the Sankarpur Wards' State, Dinagopore district, and the Government Estate of Angul, Orissa district. The third section took up the survey of the town of Calcutta, which comprises the survey of boundaries of separate properties paying revenue to Government, in addition to the ordinary particulars concerning streets and houses, and the collection of information regarding owners of properties required for the Calcutta Collectorate.

There was a slight interruption in the progress of cadastral survey operations in the Bilaspur district, owing to the partial scarcity caused by the failure of autumn crops in 1886. Two detachments from Bilaspur party were therefore sent to Raipur. The total outturn of survey work was, notwithstanding, 259 square miles more, and the average cost Rs. 36-13 per square mile less, as compared with the previous year. The average cost of operations in the Basti district increased during the year under report by Rs. 40-8-10 per square mile. This is accounted for by the unprecedented and extremely minute subdivision of property met with, the average size of fields being 0.27 of an acre. With the view of effecting a speedy completion of the cadastral survey of Gorakhpur, the party employed therein was enlarged, resulting in a larger outturn of work and a diminution of the cost per square mile. The experiment of employing Patwaris as surveyors in place ofamins was tried during the year for the first time in the Tarai district. The Patwaris showed dissatisfaction at first, and it was difficult to train the men; but the plan proved successful in the end, and it is reported that some excellent work was turned out.

7. Traverse surveys were continued by one party in the Gurdaspur,

Traverse surveys.

Gujranwala, and Shahpur districts of the Punjab, and by five parties in the Raipur, Jubbulpore-Damoh, Seoni-Chhindwara, Saugor-Narsinghpur, and Sambalpur districts of the Central Provinces. The total areas traversed are 6,085 square miles in the Punjab and 10,576 square miles in the Central Provinces. Some outlying portions of Sikh States were surveyed by the Punjab party with the view of completing the topographical maps of that part of the country. A special survey was also made in the Gurdaspur district, bordering on Kashmir territory, for the purpose of settling a dispute between British and Kashmir cultivators.

as regards the rights to water from irrigation channels. It is satisfactory to notice that the cost of traverse surveys in the Raipur district, Central Provinces, was reduced so low as Rs. 19.7 per square mile.

8. As only one officer was available for the superintendence of Astronomical work, the telegraphic longitude operations were suspended. The latitude observations were extended to the south of Jubbulpore, and observations completed at five stations.

9. Observations for registration of Tides were taken at 17 ports in India, Burma, the Andamans, Ceylon, and Aden. A new Tidal Observatory was established at Akyab, while that at Dublat, near the mouth of the Hooghly, was swept away by a cyclone in September 1886. The spirit-levelling operations consisted of six sections:—(1) from Tuticoria to Madura; (2) from Madura to Trichinopoly and Tanjore; (3) from Trichinopoly to Erode; (4) from Shoranur to Cochin Tidal Station; (5) from Kárwár Tidal Station to Marmagao; and (6) from Agoada Fort Jetty to Agoada. The heights of 418 permanent bench marks and of 6 stations of the Great Trigonometrical Survey were finally determined.

10. Two detachments, one of which was supplemented by a section of the Forest survey party on the suspension of work in the Prome district, were employed on geographical surveys in Upper Burma. One of these detachments under Major Hobday completed the reconnaissance surveys of an aggregate area of 11,000 square miles lying partly in the Shan States and the Ruby Mines district, partly in the Yaw country, and partly in the Yemethin, Mehtilla, Mandalay, and Kyaukse districts. The survey of the town of Mandalay was also continued. The second detachment, under Colonel Woodthorpe, accompanied the Military expedition that proceeded from Manipur to the Chindwin district. Colonel Woodthorpe, with his assistant Mr. Ogle, succeeded in carrying the triangulation connected with the main series of India from Manipur to the Chindwin district.

11. An account of the explorations in Nepal and Thibet by explorer M. H. has been separately published, illustrated by a map of the routes; and appended to the report under review are Notes by Colonel H. C. Tanner, with sketch maps of explorations in Bhutan and on the Sangpo river, made respectively by explorers B. N. and K. P. The latter went into Thibet in the year 1880, in company with a Chinese lama. Explorer K. P. was sold as a slave in the Pemakoi country, and managing to escape has returned with information, which, combined with an account given by a Mongolian lama, has enabled Colonel Tanner to construct an amended chart of the Sangpo river.

12. The progress of work in the Head-Quarters Offices at Calcutta was satisfactory. The number of maps published amounted to 4,158, of which 3,843 were cadastral maps. 178,398 maps, valued at Rs. 1,36,344, were issued; and the income from map sales amounted to Rs. 9,254. Owing to the contraction of cadastral and topographical surveys, and the employment of a larger number of field parties on traverse surveys, the number of original maps received for reproduction by photography was much below the average.

The work of the Drawing Office has greatly increased in connection with the mapping of surveys and reconnaissances of the Afghan Boundary Commission and by urgent demands for maps of Burma and Baluchistan. A new edition of the map of India on the large scale of 32 miles to the inch has been taken in hand, and it is also proposed to prepare an outline map on the same scale, which will be useful for representing lines of railway, canals, &c.

Experiments were continued with the view of introducing the aid of photography for reproducing the Indian Atlas sheets in lieu of hand-engraving. Reproduction by photozincography has proved a failure, but the experiment of first photographing the map from a manuscript drawing and then transferring it to

copper by the photo-electrotype process, shows that this method is well adapted to take the place of hand-engraving for maps required for temporary use and which are likely to be superseded by later editions.

The heliogravure processes have been utilized largely for the reproduction of drawings for the Archæological Survey and for a technical art series. In the Appendix are specimens of collotype printing.

36,969 mathematical instruments, valued at Rs. 1,91,183, were added to the serviceable stock, and 37,391 serviceable instruments, valued at Rs. 1,83,519, were issued on indent.

13. The work of the computing branch of the office at Dehra made satisfactory progress, and several publications containing results of the final reduction of operations of the Great Trigonometrical Survey were made.

ORDER.—Ordered, that the above Resolution be forwarded to the Local Governments and Administrations noted on the margin, to the Surveyor-General of India, and to the Foreign and Military Departments, for information. Ordered also, that the Resolution be published in the Supplement to the *Gazette of India*.

Madras.	Punjab.
Bombay.	Central Provinces.
Bengal.	Burma.
N. W. P. and	Assam.
Oudh.	Coorg.

E. C. BUCK,

Secretary to the Government of India.

GOVERNMENT OF INDIA.
REVENUE AND AGRICULTURAL DEPARTMENT.

WEATHER SUMMARY FOR JUNE, 1888.

The month under review is meteorologically one of the most important throughout the year.

It usually sees the commencement of the rains over almost the whole of India, and the relative distribution and copiousness of the total monsoon rainfall can not infrequently be gauged from the rainfall of this month. The setting in of the rains is normally a very different phenomenon on the Bengal side to what it is on the western side of India.

In the former region the change to the wet season takes place on the whole gradually. The southerly winds which blow in from the Bay and pass as east and south-east winds along the face of the mountain belt become steadily damper and cooler, and finally a rush of saturated air coming from the far south spreads over the greater part of Northern India and the change to the rains is completed.

In Lower Bengal the rains usually set in about the second week in June, in the North-Western Provinces sometime during the latter half of the month, and in the Punjab hardly before July. On the West Coast the setting in of the rainy season is usually more sudden and more striking. A slight but important change in the wind direction takes place in the shape of a shift from about west-north-west to west-south-west, and a strong, cool and saturated current suddenly replaces the moderate and warm wind which has previously prevailed. The admixture of the two currents usually results in great electrical disturbance, and as the monsoon travels up the West Coast its appearance is accompanied by severe thunderstorms. The rains ordinarily commence in Ceylon in the middle of May and reach Bombay about the 5th of June. On the present occasion the setting in of the rains has been accompanied by several abnormal features, which apparently have been principally attributable to unusual conditions over the Bay of Bengal. The distributions of pressure and of temperature and the prevailing direction of the winds in the months preceding that in which the rains ordinarily appear had all been such as to promise an early and good monsoon, and the weather experienced over India during the first ten days of the month went far to fulfil this promise. During these ten days rain in fairly large amounts fell all along the West Coast and around the shores of the Gulf of Martaban, and showers in the Central Provinces and in Upper Burmah, while in Bengal and Assam there was general though slight rain and in Upper India frequent falls and all the appearance of the monsoon. These favourable conditions did not, however, last beyond the first ten days. On the 11th there was hardly any indraught of monsoon winds into Northern India. A moderate south-westerly and westerly wind blew on the West Coast, and passed over the Peninsula and the Central Provinces, giving light showers to those regions; but over the Bay the wind's direction was also westerly and south-westerly without any tendency to draw into south and south-east at the head of the Bay as is normally the case, and in consequence all the rain due to this current fell in Burmah and Arakan. Such conditions are not only unfavourable to rainfall in Bengal and Upper India, but exert a detrimental effect on the West Coast current also, so that the succeeding days showed a decrease in the extent and amount of the rainfall derived from the Bombay branch of the monsoon, though there was at no time such an entire failure of the rains in Western as occurred in Northern India.

On the disappearance of the damp south-easterly winds which blew up the Gangetic plain between the 1st and the 10th or 11th of the month, a period of calms and variable airs commenced over Northern India. These lasted until the 13th, after which the north-westerly winds which are characteristic of the hot season set in, and lasted with some temporary interruptions until the 26th. During this period the only rain which fell over North-Western and

Northern India occurred during dust or thunderstorms, and was in no way connected with the monsoon. During the same period the air motion was generally feeble and irregular on the West Coast, and though the current from the Bombay side penetrated into the Central Provinces, and gave some rain there, the amounts were generally abnormally small and insignificant. In fact the only region in which rain fell to any extent was Burmah, where some fairly large amounts were recorded.

Owing to the cessation of the rains in Northern India and the appearance there of the north-westerly winds above alluded to, very high temperatures were experienced over that part of India. The thermometer began to rise quickly directly the rain ceased, and by the 13th or 14th excessive temperatures were reported from Bengal. At this time the temperature in Bengal was higher than it had been for many years past, and the heat all over Orissa and Lower and West Bengal was most exceptional. This area of excessively high temperature apparently travelled slowly up the Gangetic plain and Allahabad, Agra, Delhi, Lahore, and finally Peshawar experienced one after the other excessive heat.

The following table which gives the highest maxima, and the date of their occurrence for several stations in Northern India shows the progress north-westward of this wave of heat:

Stations.	Highest maximum recorded.	Mean temperature of same day.	Relative humidity of same day.	Date.
Calcutta	106.8	95.7	61	14th
Burdwan	108.7	96.6	55	14th
Benares	114.3	101.8	30	23rd
Allahabad	114.2	103.1	35	23rd
Delhi	114.0	103.6	37	25th
Ludhiana	112.8	100.0	32	25th
Peshawar	118.0	99.9	44	27th

This table shows very clearly the intense heat which prevailed at this time. The highest maximum reported was 118° at Peshawar, but relatively cool nights were experienced at this station, and the mean temperature for the 24 hours was lower than at the stations in the North-Western Provinces and the south-east of the Punjab, where the actual maxima were lower. The highest mean temperatures were at Allahabad and Delhi. In Bengal both the maxima and the daily means were lower than at stations further to the north-westward, but the heat appears to have been more trying in Bengal than elsewhere, partly probably on account of its unusualness and partly on account of the relatively high state of humidity in the atmosphere.

As mentioned above, the north-westerly winds and dry weather lasted roughly until the 26th. On that day a change which had been slowly developing began to affect the weather. This change came from the western side of India. The force of the monsoon began to steadily increase from Ceylon northward as far as Sind, and the current gradually extended into the Central and North-West Provinces. It occasioned rain over these regions, and by the 28th was blowing along the face of the North-West Himalayas as a south-east wind and brought up rain as far as the east of the Punjab. On the West Coast this increase in the strength and depth of the monsoon current was accompanied by heavy falls of rain, and the general appearance of the weather at the close of the month was more promising than it had been at any time since the withdrawal of the monsoon in the early days of the month.

The concluding table shows very clearly the general feebleness of the monsoon during the past month. Only in the districts of Assam, the Berars, the Konkan, Malabar, Burmah, and Ceylon was the monthly average rainfall exceeded; in all other districts it was in defect. The greatest deficiency was in Northern India and more especially in Bengal and Orissa. In Northern Bengal the total rainfall was only 4 inches instead of the normal 18 inches; in Lower Bengal it

was 4 inches instead of the normal 12 inches, and in Orissa $2\frac{1}{2}$ inches instead of 7 inches. In many other districts the defect was nearly as large, and in Sind there was no rain whatever.

The following table shows the amount of rain and the difference from the average during the month of June, 1888, according to districts, as far as is indicated by the telegraphic reports:

Districts.	Number of stations.	Average rainfall in June.	Difference from the average in June, 1888.
Punjab, West	7	1'49	—0'82
" East	4	3'96	—1'09
North-Western Provinces, Trans-Gangetic	9	6'16	—3'44
" " Cis-Gangetic	3	3'83	—2'42
Behar	2	6'64	—4'18
Northern Bengal	2	17'99	—14'06
Assam—Cachar	3	19'89	+7'97
Lower Bengal—Chutia Nagpur	7	12'35	—8'07
Orissa—Northern Circars	6	6'99	—4'52
Central Provinces, South	7	8'80	—3'97
Berar—Khandeish	2	6'06	+1'29
Rajputana, Central India, Saugor and Nerbudda	8	4'85	—2'41
Sind—Cutch	3	0'22	—0'22
Guzerat	3	5'68	—1'60
Konkan	4	22'19	+1'71
Deccan—Hyderabad	5	5'28	—0'71
Malabar	4	32'23	+10'93
Mysore—Bellary	4	2'94	—1'01
Carnatic	6	1'79	—0'64
Lower Burmah	7	25'46	+5'65
Ceylon	2	8'17	+2'43

W. L. DALLAS,

SIMLA, 5th July, 1888.

for Offg. Meteorological Reporter to the
Government of India.

E. C. BUCK,

Secretary to the Government of India.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending 8 a.m. on
Monday, July 2nd, 1888.**

In last week's summary of the weather it was mentioned that the rainfall in Assam and Burmah and more particularly at Cherrapunji had increased very considerably, and this was taken as an indication that the monsoon current was increasing in volume and strength. The observations of the present week show that this increase has taken place, and the conditions now existing over India are more promising and more satisfactory than any that have prevailed since quite the commencement of June. This change to more favourable conditions has been brought about by two causes. In the first place, quite at the commencement of the week under review, the monsoon current along the whole length of the West Coast from Ceylon to Sind increased in force and backed slightly towards south-west. With this higher force the current penetrated first into the Central Provinces and then into the North-Western Provinces, occasioning a considerable rise of humidity and cloud and some rain in those two regions. As rain commenced to fall in Upper India the Bay of Bengal branch of the monsoon rose in force and spread out over Bengal, and by the 28th monsoon conditions of high humidity, overcast skies, and rain were established over the whole of India, except the Carnatic and the Punjab. As rain continued to fall—heavily on the West Coast and moderately elsewhere—the monsoon conditions extended and intensified, and by the close of the week rainfall had extended to all parts of India, except the Carnatic, Sind, Rajputana, and the south of the Punjab. One very important feature in the meteorology of the past week is the fact that the abnormal conditions which have existed for so long over the head of the Bay have disappeared, at least for the time being, and steady south-westerly winds have prevailed over the Bay and on the Arakan Coast. From an account kindly telegraphed to this Department by the Superintendent of the Peninsular and Oriental Company, Bombay, it would appear that normal monsoon weather prevailed over the Arabian Sea during the past week. The account says: "A moderate monsoon was experienced from Aden to the east of Socotra, with very sultry weather, but no thunder or lightning. Thence moderate winds and an unusually high sea, but no rain or thunder till 300 miles from Bombay, when frequent rain squalls passed over the vessel. The wind was south-west during the first part of the voyage, then veered to west-south-west, and finally at the close was from west."

On the 25th the Chart showed a considerable increase in the force of the winds in Ceylon, and a slight increase on the West Coast, but at the head of the Bay and in South Bengal the winds were weaker, and the north-westerly winds in Upper India were stronger and steadier. The barometer had fallen rapidly in the Punjab, but the general distribution was hardly more favourable than it had been for some days to any considerable advance of monsoon winds. The rainfall was slightly heavier in Southern and Central India, and rain in small amounts was falling over the head of the Bay. Temperature had risen in Upper India, and was very high all over the Upper Provinces. Taking all the changes into consideration, however, conditions appeared

slightly more promising than they had been for several days previously, the most favourable feature being the considerable increase in the Ceylon winds. On the 26th there occurred a slight but still distinct advance to more seasonable conditions. The monsoon current had, without exception, increased on the West Coast, and very strong winds were reported from Colombo. Rain in larger amounts had fallen on the West Coast, and showers had occurred over Guzerat and the Central Provinces. This strong current had advanced right across the Central Provinces on this day, and had begun to appear in the North-Western Provinces, so that there had occurred a considerable increase of humidity over Upper India. Temperature had consequently fallen, except in the Punjab, where very high maximum temperatures still prevailed. The Chart of the next morning (the 27th) showed a still further extension of the Bombay current into Upper India, and an increase in the amount of cloud and of humidity in that region. At several places along the foot of the hills the wind was south-easterly. Very heavy rain had fallen in the West Coast districts, and at several places in Eastern India the rainfall had considerably increased. Strong monsoons were blowing on either side of India, and appearances were altogether favourable to a general burst of rainfall. On the 28th rain was reported from all parts of India, except the extreme north-west and the Carnatic. On the West Coast the amounts continued large, and at several places in Eastern India considerable falls were also reported. Humidity and cloud had increased over the greater part of the country, and, except in the northern and western districts of the Punjab, where very high maximum readings were still reported, the temperature has generally fallen. On the morning of the 29th pressure was decreasing generally, and steep gradients prevailed. Moderately strong monsoon currents prevailed, and rain had fallen in the same districts as on the previous day. In Malabar and the Konkan the amounts continued large. The thermometer in the Western Punjab still recorded high maximum temperatures, but on the whole there was a general tendency towards decreasing temperature. The Chart of the 30th showed that the monsoon current at the head of the Bay had fallen lighter, while that on the West Coast had increased. Rain had fallen generally, though the amounts on the West Coast were not so heavy as on the previous day. Rain was falling in parts of the Punjab, and temperature had consequently decreased in that Province. On the 1st favourable monsoon conditions were shown over nearly the whole country. Rain had fallen generally and moderately heavily, and temperature had decreased over nearly the whole of India.

The table of rainfall at the close of this report exhibits much more favourable returns than those of the past two weeks. The change to normal monsoon conditions did not, as is shown above, occur till after the middle of the week under review, so that there are still large tracts of country where the rainfall has again been much below the normal; but the number of districts reporting an excess is very much larger this week than last, and in those divisions where excess is common to both weeks the excess has become very much greater. Last week the only divisions reporting an excessive fall were South-Western India, Lower and Central Burmah, and Assam. In the present week an excessive rainfall is reported from the whole of Burmah, the whole of Assam, and the greater part of Bengal, from Oudh, from the whole of the West Coast districts, from the Berars, and from Hyderabad. The largest excess has been in Assam (Surma), where it amounts to $17\frac{1}{2}$ inches. Very heavy and steady rain has been experienced in this division. At Cherrapunji the

average daily fall has exceeded 9 inches, the total for the week being 64·6 inches. Heavy falls were also recorded at several places in Burmah, the largest reported being 17 inches at Kyaukpyu. In Bengal rain began to fall heavily on the 28th, but the weekly totals are not generally large, though at one station in the Jalpaiguri division over 20 inches was recorded. In Chota Nagpur and Behar the rainfall, though very much heavier than it was last week, was nowhere excessive, and the normal average was only slightly exceeded. In Oudh there occurred some heavy falls, and the totals for some places in Sultanpur, Unoa, Lucknow, Bahraich, and Gonda were large. In the North-Western Provinces and the Punjab the rainfall was not heavy, and the normal average was not reached. In the Southern Punjab, indeed, no rain at all fell. In Malabar all the districts report heavy rain, and the normal average was largely exceeded; the same is true of the Konkan, in both of which districts several places record weekly amounts exceeding 20 inches. The central parts of South Madras, the Bombay Deccan, the Berars, Guzerat, and Hyderabad (South) all had more than their normal amount, and several places within those divisions reported heavy falls. One station in the Surat district had over 18 inches, and several stations had between 5 and 10 inches within the week.

In all other parts of India, except those mentioned above, the rainfall has been deficient, but the amounts are generally not large. In Sind, Rajputana, and the west and south of the Punjab there has been either no rain or only a few drops.

The final column of the table, which gives the excess or defect of the division, expressed as a percentage, though showing that the seasonal rainfall is still largely deficient over a great part of the country, yet shows a much more satisfactory set of conditions than was the case last week. In several districts the defect which previously existed has been changed to an excess, and in other places, except in North-Western India, the percentage of defect has been largely decreased.

Province.	Division.	RAINFALL DATA FOR WEEK ENDING JULY 2ND.			RAINFALL DATA FROM MAY 14TH TO JULY 2ND.		
		Average actual rainfall of division.	Average normal rainfall of division.	Excess or defect, in inches.	Average actual rainfall of season to date.	Average normal rainfall, May 14th to July 2nd.	Excess or defect of seasonal rainfall expressed as a percentage.
BURMAH	Tenasserim	ins. 10'38	ins. 9'00	+1'38	ins. 68'56	ins. 32'42	+111
	Lower Burmah	7'75	4'17	+3'58	27'92	27'13	+3
	Central do.	8'59	3'39	+5'20	24'92	21'81	+14
	Upper do.	3'13	?	?	13'74	?	?
	Arakan	22'17	13'69	+8'48	46'46	62'75	-26
BENGAL AND ASSAM...	Eastern Bengal	6'30	3'88	+2'42	17'47	26'06	-33
	Assam (Surma)	21'23	3'69	+17'54	55'61	38'86	+43
	Do. (Brahmaputra)	6'37	4'49	+1'88	21'43	24'75	-13
	Deltaic Bengal	3'47	2'26	+1'21	8'98	14'25	-37
	Central do.	3'19	2'34	+0'85	8'91	13'38	-33
	North do.	8'28	5'11	+3'17	23'08	32'12	-28
	Orissa	1'14	3'44	-2'30	5'47	11'29	-52
	Chota Nagpur	3'35	2'60	+0'75	5'47	10'41	-47
	Behar (South)	1'41	2'50	-1'09	3'20	7'56	-58
NORTH-WEST PROVINCES AND OUDH.	Do. (North)	3'37	2'67	+0'70	8'83	10'37	-15
	North-West Provinces (East)	1'27	1'94	-0'67	2'51	5'23	-52
	Oudh (South)	2'17	2'10	+0'07	3'12	5'42	-42
	Do. (North)	3'25	2'35	+0'90	4'82	6'76	-29
	North-West Provinces (Central).	0'95	1'29	-0'34	1'74	3'79	-54
	North-West Provinces (West).	0'71	1'36	-0'65	1'49	4'10	-64
PUNJAB	North-West Provinces (submontane).	1'71	2'66	-0'95	3'64	6'26	-42
	Punjab (South)	0'03	0'82	-0'79	0'64	2'45	-74
	Do. (Central)	0'24	1'60	-1'36	1'48	4'04	-63
	Do. (submontane)	0'75	2'02	-1'27	2'06	4'19	-51
	Do. (Hill Districts)	1'33	?	?	4'10	?	?
	Do. (North-West)	0'14	0'88	-0'74	0'53	2'58	-79
BOMBAY AND MALABAR COAST DISTRICTS (MADRAS).	Do. (West)	0'02	0'34	-0'32	0'39	1'34	-71
	Malabar	15'77	7'34	+7'43	63'71	45'97	+39
	Madras (S. Central)	1'72	0'32	+1'40	8'41	4'88	+72
	Coorg	7'12	8'34	-1'22	29'10	34'06	-15
	Mysore	0'32	0'54	-0'22	?	6'80	?
	Konkan	16'96	7'21	+9'75	41'34	31'30	+32
	Bombay, Deccan	1'71	1'35	+0'36	6'12	7'97	-23
	Hyderabad (North)	...	...	...	...	...	...
CENTRAL PROVINCES AND BERARS.	Khandeish	0'85	1'41	-0'56	4'69	6'64	-29
	Berars	2'48	2'41	+0'07	6'92	7'79	-11
	Central Provinces (West)	1'82	2'69	-0'87	6'10	8'84	-31
	Do. do. (Central)	4'07	3'38	+0'69	5'42	10'00	-45
BOMBAY (NORTH) ...	Do. do. (East)	3'28	3'31	-0'03	4'95	10'65	-53
	Guzerat	3'89	2'70	+1'19	4'87	6'77	-28
	Kattiawar	0'90	1'33	-0'43	2'29	2'18	+5
RAJPUTANA AND CENTRAL INDIA.	Sind	0	0'04	-0'04	0'01	0'04	-75
	Central India (East)	0'78	1'96	-1'18	1'74	3'85	-55
	Rajputana (East), Central India (West).	0'12	1'00	-0'88	0'59	3'14	-81
	Rajputana (West)	0	0'50	-0'50	0	1'90	-100
MADRAS	East Coast (North)	0'71	1'56	-0'85	3'47	7'41	-53
	Hyderabad (South)	1'56	1'40	+0'16	8'71	5'18	+68
	Madras (Central)	0'04	0'22	-0'18	2'03	4'15	-51
	East Coast (Central)	0'58	0'99	-0'41	5'20	4'30	+21
	Do. (South)	0'13	0'41	-0'28	2'95	3'43	-14
	Madras (South)	0'07	0'14	-0'07	1'83	2'14	-14

SIMLA, 2nd July, 1888.

W. L. DALLAS,
for Offg. Meteorological Reporter to the
Government of India.

E. C. BUCK,
Secretary to the Government of India.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

Weekly Report on the State of the Season and Prospects of the Crops.

Madras.—*For week ending 30th June, 1888.*—Heavy rains on the West Coast, and slight in other districts. More rain is wanted in Ganjam, Vizagapatam, Bellary, South Arcot, Trichinopoly, Madura, Tinnevely, Coimbatore, and Salem. Crops generally good; affected by want of rain in Vizagapatam and Madura. Pasture scanty in Bellary, North Arcot, Madura, and Salem. Agricultural operations progressing. Prices generally rising where not stationary. General prospects fair.

Bombay.—*For week ending 4th July, 1888.*—River low in Sind, and field operations consequently delayed in Karachi and Shikarpur. Rainfall insufficient in parts of Kaira, Panch Mahals, Nasik, Ahmednagar, Sholapur, Satara, Bijapur, Belgaum, and Dharwar; good elsewhere. Agricultural operations progressing generally, but retarded in parts, where rain is insufficient. Fodder scarce in parts of Broach, Nasik, Poona, Kathiawar, and Baroda.

Bengal.—*For week ending 3rd July, 1888.*—Monsoon has at last set in, and temperature has fallen considerably. Rainfall has been general over the whole Province and rather heavy in most districts, but still deficient in Orissa. Agricultural prospects have considerably improved in consequence. Cultivation has been resumed and standing crops, though somewhat injured by the drought, are now safe. Indigo manufacture in progress. Cattle suffering from want of pasture in parts of Chota Nagpur.

North-Western Provinces and Oudh.—*For week ending 4th July, 1888.*—Rain has fallen throughout the Provinces, and except in a few districts in good quantities. Ploughing and sowing for the *khari* have commenced. Markets are well supplied. Prices are on the whole steady, though with a tendency to rise in places. The condition of agricultural stock is satisfactory.

Punjab.—*For week ending 4th July, 1888.*—Rain has fallen in several districts. Prices are stationary, except at Delhi, where they are slightly rising. *Khari* ploughings and sowings are in progress. Rain urgently wanted at Hissar and Delhi. *Khari* crops are in good condition. No damage done to crops. Stock cattle are generally healthy. Fodder sufficient, except in three districts.

Central Provinces.—*For week ending 4th July, 1888.*—Good rain has fallen in Raipur and Bilaspur. Rice sowings are progressing favourably. Sugarcane doing well. Rain scanty in other districts, and more is required for autumn sowings which are beginning. Cattle in fair condition. No report from Sambalpur.

Burma.—*For week ending 30th June, 1888.*—Ploughing for wet weather crops is progressing; sowing has generally commenced in Lower Burma; the rainfall was ample, but in Upper Burma it was very light, and more rain is urgently required in parts of Yeu and in Minbu districts. The price of paddy has risen in Rangoon and in the Upper Chindwin district; it has fallen in Prome, Thayetmyo, Kyaukse, Myingyan districts and elsewhere. General prices are stationary. Paddy is said to be somewhat scarce in Upper Chindwin. Supplies are reaching Yamethin, where stocks were said to be very low.

Assam.—*For week ending 4th July, 1888.*—Weather seasonable. Rainfall general and heavy. Early rice being reaped; late rice being sown. Prospects of crops good, except that early rice has been injured by excessive rainfall in Darrang and Sylhet. Prospects of tea favourable, except in Cachar, where it is still backward owing to wet.

Mysore and Coorg.—*For week ending 4th July, 1888.*—Rainfall scanty throughout the State. Crops are suffering from want of water in the districts on the plains, and in parts of the Shimoga district. Dry crops are reported to be damaged by insects. Outturn of harvest fair.

Heavy rain in Coorg during the week. Sowing of rice in progress. Rains favourable.

Berar and Hyderabad.—*For week ending 4th July, 1888.*—Weather warm and cloudy. Good rainfall during the week. Cotton sowing nearly completed. Agricultural stock generally in good condition. Scarcity of fodder is being reduced in Amraoti and Wun districts, and also in Pusad taluk of the Basim district. No marked change in prices of foodgrains.

Some rain during the week in Hyderabad. Agricultural prospects fair. Prices stationary.

Central India.—*For week ending 4th July, 1888.*—Fairly good rain throughout the Agency, but not sufficient in some parts, as Gwalior, Bhopal, Bundelkhand, and Western Malwa. Agricultural operations have been started in Bundelkhand, Baghelkhand, and Western Malwa, and in progress in Bhopal and Bhopawar. No change in condition of agricultural stock. Scarcity of fodder in Bhopawar apprehended last week abating. Prices of foodgrains in Gwalior and Neemuch rising.

Rajputana.—*For week ending 4th July, 1888.*—Rainfall still partial and scanty. Agricultural operations commenced. Agricultural stock generally good. Pasturage or fodder sufficient. Prices steady, slightly rising at some places.

Nepal.—*For week ending 28th June, 1888.*—Some rain. Weather cooler, owing to fall of rain. The land is being prepared for cold weather rice. Indian corn crop spoilt; prospects are still not good, though rain has fallen.

E. C. BUCK,

Secretary to the Government of India.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
RAILWAY TRAFFIC.

No. X. OF 1888-89.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used, as far as possible.

Latest Return received.	RAILWAYS.	Total mean length open.	RECEIPTS FOR WEEK ENDING 11TH JUNE, 1887.		Total mean length open.	RECEIPTS FOR WEEK ENDING 9TH JUNE, 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 11TH JUNE, 1887.		TOTAL RECEIPTS FROM 1ST APRIL TO 9TH JUNE, 1888.		Total increase in 1888-89.	Total decrease 1888-89.
			Total.	Per mile open.		Total.	Per mile open.	Total.	Per mile open per week.	Total.	Per mile open per week.		
			Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
<i>State Lines worked by Companies.</i>													
23rd June, 1888	East Indian	1,519	9,14,184	602	1,514	8,73,396	577	1,02,34,652	674	96,77,023	639	...	5,57,629
16th ditto	Rajputana-Malwa (a)	1,664	3,70,080	222	1,664	3,72,000	224	39,08,271	228	40,42,661	243	1,34,390	...
23rd ditto	Sindia	75	8,011	107	75	8,757	117	94,891	127	79,113	106	...	15,778
23rd ditto	Patna-Gya	57	8,753	153	57	7,382	129	90,597	169	92,003	161	...	4,592
16th ditto	Bengal-Nagpur (b)	186	33,083	181	186	29,477	158	4,65,212	243	4,23,433	227	...	42,777
23rd ditto	Dildarnagar-Ghaziipur	12	952	79	12	950	79	12,694	106	11,715	98	...	97
16th ditto	Mysore	140	10,297	74	140	10,154	73	98,525	69	1,07,218	77	8,693	...
23rd ditto	Southern Mahratta (c)	672	71,279	106	850	98,373	116	6,44,200	101	8,11,950	96	1,67,730	...
16th ditto	Indian Midland	...	...	...	...	...	...	(e) 39,105	100	(f) 1,46,603	120	1,07,558	...
2nd ditto	Cuddapah-Neilore	...	...	...	83	4,071	49	...	...	40,979	49	40,979	...
16th ditto	Bareilly-Pilibhoet	36	1,010	53	36	1,407	41	21,628	60	18,039	50	...	3,56
16th ditto	Lucknow-Sitapur	...	...	...	...	...	...	...	...	...	...	...	...
16th ditto	Sihraman	85	4,895	58	105	5,867	56	45,315	57	58,098	55	12,783	...
	TOTAL	4,446	14,24,044	320	4,722	14,11,894	299	1,56,61,090	344	1,55,07,917	319	...	1,53,17
<i>State Lines worked by Government.</i>													
16th June, 1888	North-Western (g)	2,094	4,91,237	235	2,411	4,66,054	193	44,79,402	208	50,56,951	210	5,77,549	...
16th ditto	Wardha Coal	45	14,000	312	45	13,997	311	1,75,391	379	1,04,136	305	...	11,22
16th ditto	Bengal Central	125	13,735	110	125	11,193	89	1,33,071	168	1,18,702	95	...	16,36
16th ditto	Eastern Bengal Railways (h)	645	1,33,966	208	672	1,38,743	206	14,18,067	220	14,41,957	213	23,890	...
16th ditto	Nalhati	27	1,698	62	27	2,447	75	17,823	65	18,028	66	295	...
16th ditto	Tirhoot	249	36,418	146	259	31,948	123	3,42,103	137	3,77,374	146	35,271	...
16th ditto	Burma	333	55,232	166	392	55,510	142	6,68,123	201	6,48,077	176	...	19,14
16th ditto	Jorhat	26	1,019	39	31	1,718	56	9,110	30	10,148	34	1,332	...
9th ditto	Cherra-Companyganj	7	3	...	7	111	15	493	7	725	10	232	...
	TOTAL	3,551	7,47,328	210	3,969	7,21,297	182	72,45,559	198	78,37,298	198	5,91,739	...
<i>Lines worked by Guaranteed Companies.</i>													
16th June, 1888	Madras	831	1,52,257	183	842	1,56,268	186	17,01,495	199	16,11,601	191	...	89,88
16th ditto	South Indian	654	1,07,560	164	654	1,09,442	168	10,39,432	155	10,96,208	168	56,756	...
16th ditto	Great Indian Peninsula	1,504	10,70,695	712	1,504	9,85,943	655	1,17,50,019	760	1,16,86,408	777	...	63,61
16th ditto	Bombay, Baroda and Central India	461	3,10,932	674	461	2,36,000	512	36,55,268	771	31,15,534	676	...	5,39,73
16th ditto	Oudh and Rohilkhand	686	1,19,841	175	693	1,29,798	187	10,02,237	234	10,18,260	234	16,023	...
	TOTAL	4,136	17,61,285	426	4,154	16,16,956	389	1,97,48,471	464	1,91,28,011	460	...	6,20,46
GRAND TOTAL (GUARANTEED AND STATE)		12,133	39,32,657	324	12,845	37,50,147	292	4,26,55,120	342	4,24,73,226	328	...	1,81,89
GROSS ESTIMATED EXPENSES		...	...	...	...	...	...	1,81,69,580	145	1,85,22,605	143	...	...
NET RECEIPTS		...	...	...	...	...	...	2,44,85,540	197	2,39,50,561	185	...	5,34,97
<i>Assisted Companies.</i>													
16th June, 1888	Bengal and North-Western	376	50,553	134	376	57,440	153	5,11,672	132	5,79,295	154	67,623	...
23rd ditto	Tirakeshwar	22	5,230	235	22	5,078	228	63,118	284	65,711	295	2,593	...
16th ditto	Rohilkhand-Kumaun	67	5,686	85	67	7,151	107	79,129	118	77,020	115	...	2,18
9th ditto	Dibru-Sadiya	78	8,420	108	78	9,975	128	88,809	110	83,803	107	...	5,00
	TOTAL	543	69,889	129	543	79,644	147	7,42,728	133	8,05,829	148	63,101	...
<i>Native States.</i>													
16th June, 1888	The Nizam's (Guaranteed Company)	208	31,438	151	277	26,363	95	3,43,838	161	3,03,135	109	...	40,70
16th ditto	The Gaekwar's	59	2,798	47	59	3,070	52	44,545	43	35,557	60	...	8,98
16th ditto	The Gaekwar's Mehsana Vadnagar	21	866	41	21	900	43	8,484	39	11,333	54	2,849	...
16th ditto	Bhavnagar-Gondal	193	18,603	96	193	19,573	101	3,21,182	102	2,61,053	136	...	59,52
16th ditto	Morvi	68	3,176	47	68	2,311	37	45,053	66	50,945	75	5,892	...
16th ditto	Jodhpore	124	7,174	58	124	7,500	60	77,347	61	76,033	64	1,686	...
	TOTAL	673	64,055	95	742	59,917	81	8,40,449	121	7,41,056	100	...	98,75

(a) Includes the Cawnpore-Achnera State Railway.
(b) Includes the Katni-Umaria State Railway.
(c) Includes the Bellary-Kistna State Railway.
(d) Return not received.
(e) Total receipts from 1st April to 4th June, 1887.

(f) Total receipts from 1st April to 2nd June, 1888.
(g) Includes the Amritsar-Pathankot and Rajpura-Patla State Railways.
(h) Includes the Northern Bengal, Dacca, Kaunia-Dharila and Assam-Belga State Railways.

SIMLA, 5th July, 1888.

M. C. BRACKENBURY, Major, R.E.,

Under-Secretary



SUPPLEMENT TO
The Gazette of India.

No. 28.} CALCUTTA, SATURDAY, JULY 14, 1888.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.

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GOVERNMENT OF INDIA.
DEPARTMENT OF FINANCE AND COMMERCE.

RETAIL PRICES FOR THE 2nd HALF OF APRIL AND 1st HALF OF JUNE 1888.

(See Supplement to the Gazette of India, dated 26th May and 7th July 1888.)

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.																															
DISTRICT.				WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLAM (Sorghum vulgare).		BAJRA OR CUMBU (Pennisetum typhoides).		MARUA OR RAGI (Eleusine indica).		KANGRI OR KARUN, ITALIAN MILLET (Setaria italica).		GRAM, CHENNA, CHOLA, KADALAY OR SUNAGA (Cicer arietinum).		MAIZE (Zea Mays).		ARHAR OR THUR CADIAN PEA (Cajanus indicus).		FIREWOOD.		SALT.			
Present		Past		Present		Past		Present		Past		Present		Past		Present		Past		Present		Past		Present		Past		Present		Past	
S. Ch.		S. Ch.		S. Ch.		S. Ch.		S. Ch.		S. Ch.		S. Ch.		S. Ch.		S. Ch.		S. Ch.		S. Ch.		S. Ch.		S. Ch.		S. Ch.		S. Ch.		S. Ch.	
15	0	14	8	23	0	14	0	7	0	12	0	16	0	17	0	18	0	21	8	21	8	21	0	17	0	16	0	160	0	10	8
16	3	15	14	22	9	8	94	6	9	12	11	13	17	3	14	0	21	8	16	8	22	9	22	10	19	12	129	0	10	12	
17	2	16	12	25	0	6	0	6	0	10	13	49	12	17	3	10	18	16	8	22	9	22	9	22	10	132	0	10	12		
18	0	17	8	25	0	6	0	7	0	10	13	20	23	16	8	4	14	16	0	23	0	23	8	23	0	130	0	11	8		
19	8	16	8	25	0	5	8	11	0	11	10	19	17	15	0	...	...	14	0	25	8	25	8	25	0	130	0	11	0
20	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	15	0	25	8	25	8	25	0	140	0	12	0
21	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	24	0	24	0	12	12	...	...	140	0	10	0
22	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
23	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
24	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
25	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
26	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
27	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
28	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
29	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
30	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
31	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
32	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
33	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
34	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
35	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
36	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
37	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
38	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
39	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
40	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
41	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
42	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
43	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
44	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
45	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
46	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
47	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
48	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
49	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
50	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
51	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
52	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
53	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
54	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
55	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
56	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
57	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
58	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
59	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
60	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
61	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
62	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
63	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
64	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
65	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
66	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
67	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
68	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
69	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
70	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
71	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
72	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
73	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
74	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
75	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
76	0	14	0	25	0	5	8	11	0	11	10	19	17	15	0	...	...	...	...	...	...	10	8	...	...	180	0	7	0
77	0	14	0																												

2nd half of April 1888.

N.W. PROVINCES.

[illegible]

* Firewood is sold by head-load, bullock-load, cart-load, and not by weight.

* No sales in market.

DEPARTMENT OF FINANCE AND COMMERCE,
(Statistical Branch,

E. J. SINKINSON,
Offg. Secretary to the Government of India.

E. J. SINKINSON,

GOVERNMENT OF INDIA.
HOME DEPARTMENT.

REVIEW OF THE GENERAL REPORT ON THE STATE AND PROGRESS OF EDUCATION
IN BRITISH INDIA, BY SIR ALFRED CROFT, K.C.I.E., M.A.

No. 199.

Extract from the Proceedings of the Government of India in the Home Department (Education),—under date Simla, the 18th June 1888.

Read—

Despatch from Her Majesty's Secretary of State for India, No. 43, dated the 23rd April 1885, directing the preparation of a general annual Education Report.

Despatch to Her Majesty's Secretary of State for India, No. 64, dated the 15th March 1887.

Letter to the Hon'ble Sir Alfred Croft, No. 124, dated 18th May 1887.

Read also—

Letter from the Hon'ble Sir Alfred Croft, No. 2, dated 1st April 1888, submitting the General Report in question.

R E S O L U T I O N.

In the Resolution No. ¹⁰/₃₀₉, dated 23rd October 1884, recorded in the Home Department, the Governor-General in Council reviewed the Report of the Education Commission, and laid down for the future guidance of Local Governments and Administrations the broad lines of the Educational policy which the Government of India desired to pursue. That Resolution met with the general concurrence of Her Majesty's Secretary of State, who, in expressing his approval communicated the following instructions to the Government of India. "In order to stimulate the efforts of the various authorities in the promotion of education on the lines now laid down, it would, I think, be well if Your Excellency in Council would direct the preparation of a general annual report, embracing the important features of the several provincial reports (including Madras and Bombay), and transmit copies of the same to the Secretary of State, with a Resolution by the Government of India reviewing such general report."

2. For reasons into which it is unnecessary to enter here, it was found desirable to postpone the preparation of the first General Report required by the Secretary of State until last year, when the work was entrusted to Sir Alfred Croft, K.C.I.E., Director of Public Instruction in Bengal. It was at first anticipated that the Report would be completed in three months; but after entering on the undertaking, Sir Alfred Croft found it necessary to collect from Local Governments information of various kinds which was not supplied in the departmental reports, but without which the special report called for would lose much of its value. Considerable time elapsed before all the information was collected; and it was not until last April that the report was submitted to Government. In his letter of the 1st April 1888, cited in the preamble, Sir Alfred Croft explains the cause of the delay; and the Governor-General in Council, while regretting the delay, very readily believes that it was not due to any want of industry or attention on the part of the writer of the report. The report as now submitted is an able and full exposition of the educational condition of British India; and the Governor-General in Council desires to thank Sir Alfred Croft for the careful manner in which he has carried out his instructions.

3. These instructions were devised to secure a report which should be a compendium of the information supplied by the different Local Governments, as regards the condition of education in each province, the methods and organization by which it is imparted, and the extent to which effect is being given to the recommendations of the Education Commission. Sir Alfred Croft has carried these instructions into effect by writing an introductory chapter, giving

an outline of the history of education from 1881 (the year for which statistics were supplied to the Education Commission) to 1885; and by then presenting a comprehensive view of the state of education in each province from the statistical, financial, and administrative points of view.

The Governor-General in Council does not think it necessary to make any examination of the merely introductory portion of the Report; and the following remarks are, therefore, directed to presenting a general view of the present state of education in India, with such references to the earlier statistics as may be necessary to illustrate the progress made. As the statistics for 1886-87 are now in the possession of the Government of India, they will be quoted with a view to supplement the information furnished in the Report, and to bring that information up to date.

4. Education in British India is conveyed through the medium of two classes of Institutions: Public Institutions and Private Institutions. A Public Institution is defined to be "a School or College in which the course of study conforms to the standard prescribed by the Department of Public Instruction, or by the University, and which either is inspected by the Department or regularly presents pupils at the Public Examinations held by the Department or the University." A School or College not coming within the above definition is called a Private Institution.

As may be inferred from the preceding definition, the information available regarding Private Institutions is neither exhaustive nor reliable. Such information as exists is set forth in chapter VIII of the Report; and shows that the instruction imparted in Private Schools is, as a rule, less systematic and efficient than that imparted in similar schools controlled by the Department. It is not intended in this Resolution to dwell at any length on the character or progress of the education conveyed in these private schools; but in order to present a general view of the condition of education in India, it is desirable for the moment to ignore the difference between the two classes of Institutions, and to combine the statistics of attendance at both.

5. Proceeding on this plan, it will be seen that in 1881-82, the earliest date touched by the Report, there were in British India 94,989 Institutions of all grades attended by 2,451,989 pupils. Between 1882 and 1885 there were considerable fluctuations, both in the number of Institutions and of students attending them; the most marked fluctuation being exhibited in the Province of Bengal, where over 14,000 rudimentary schools, attended by more than 120,000 pupils, were excluded from the public class without apparently being enumerated in the private class of schools. But, notwithstanding this, the total of Institutions stood in 1885-86 at 122,367, and the attendance at 3,325,080. The following year the institutions numbered 127,116, and the pupils 3,343,544. The broad fact which emerges from a comparison of these statistics is that in the five years ending with 1886-87 the number of educational Institutions of all sorts in British India increased by one-third, while the number of pupils increased by a still larger proportion.

6. The progress of education within the last five years, which the preceding figures evidence, has been marked; but, viewed with reference to the population as yet untouched by our educational agencies, the progress made still leaves a great deal to be desired. In Western countries it is commonly assumed that children of a school-going age form 15 per cent. of the population. In paragraph 94 of the Report, Sir Alfred Croft seems inclined to hold that for India that proportion is somewhat less than the reality. Assuming, however, that the conventional 15 per cent. is correct for India, it appears from a consideration of the census statistics that only one child out of every ten of a school-going age is actually under instruction. This low percentage is due to the extreme backwardness of female education. The case in regard to males is not nearly so bad; for while of females of a school-going age, not one in fifty (less than two per cent.) is at school, there are 19 males out of every hundred, or nearly one-fifth of the male population of a school-going age, under instruction of some form or other. In the opinion of the Government of India, the proportion of the male population under

instruction cannot, having regard to the circumstances of the country, be considered otherwise than satisfactory.

7. *Passing from the consideration of the educational statistics in their widest aspects, to the question of the general character of the instruction imparted, it is at once apparent that to the enormous mass of children the instruction conveyed is of the most elementary kind. Broadly speaking, the system of education administered in British India operates through three grades of institutions: Primary Schools, Secondary Schools, and Colleges. The Primary School aims at teaching the elements of reading and writing, and such simple rules of arithmetic and land measurement as will enable the peasant in a purely agricultural country to look after his own interests. This is not a very ambitious programme; but, at the present time, it meets the wants of 94·5 per cent. of the entire school-going population. The Secondary Schools, in which an advanced instruction in the vernacular and a substantial knowledge of English are conveyed, claim an attendance of 5·1 per cent. of that population, while the remainder (about $\frac{1}{2}$ per cent.) supplies students to all the colleges which impart the highest English education, or teach the various professions of Law, Medicine, and Engineering.*

8. The preceding remarks, made with a view to indicating the relative extent of rudimentary and advanced education in India, will be more significant and intelligible if supplemented by a citation of the statistics of actual attendance at the various classes of schools. Beginning with the lowest or Primary class, it appears from the Report that in 1881-82 there were 86,269 Public Primary schools attended by 2,156,242 children (2,070,963 boys and 85,279 girls). There were also Private schools of this class, the precise number of which is not apparent; but it probably did not exceed 4,000 attended by some 50,000 children. The grand total of Primary schools, public and private, five years ago, may therefore be taken at 90,000 in round numbers, attended by 2,200,000 children. In 1885-86, the number of schools had increased to 111,117, and the attendance to 2,811,934. The returns for 1886-87 show that there were in that year 114,303 schools, and 2,806,472 pupils, the decrease in attendance being chiefly due to a temporary cause, the operation of which has now diminished, namely, the disturbed condition of Lower Burma. These totals show that on the whole there is an increasing appreciation of that form of education which is most useful and essential for the great mass of the people.

9. Incidental reference has been made to the number of girls attending Primary schools in 1881-82; and, before passing on to the statistics of secondary and collegiate education, it may be well to indicate here the progress which, during the last five years, has been made in this the elementary stage of female education. So far as can be gathered from the Report, there were in 1881-82, excluding private elementary institutions for which separate statistics are not available, 2,678 elementary schools for girls which were attended by 85,279 pupils. In 1885-86, the number of schools for girls had increased to 5,210 (including 873 private schools), and the attendance to 134,749 (12,251 pupils in private schools). In 1886-87, the number of girls' schools had reached 6,281 (including 1,767 private schools), and the attendance 149,922 (including 17,205 pupils at private institutions). It is interesting to note that for every Mahomedan girl at school there are from three to four Hindu girls, which is in accordance with the proportion which the two great creeds bear to each other both in the general and in the school population. These figures are, indeed, insignificant when compared with the total female population of a school-going age; but they seem to the Governor-General in Council to be satisfactory as indicating the fact that steady, if slow, progress is being made. It must be remembered that it is difficult to overrate the obstacles to be overcome in promoting female education in India.

10. Secondary education is the connecting link between Primary or Elementary, and Collegiate or University education. It is imparted in two classes of school, the middle and the high school; the instruction conveyed in the latter being of a more advanced character than that imparted in the former. While the middle school has always a vernacular basis thereby touching the Primary system, the high school concerns itself mainly with education through the medium of English alone, and reaches the Collegiate course.

In 1881-82, there were 3,932 secondary schools for boys attended by 215,731 pupils (149,265 attending the English and 66,466 the vernacular side). In 1885-86, the schools numbered 4,083 and the pupils 394,508 (264,918 receiving a purely English education); while in 1886-87, there were 4,160 schools and 404,189 students, of whom 271,654 were in the exclusively English division. It thus appears that during the last five years the number of male pupils receiving a purely English education introductory to a University course has increased by about 80 per cent.; while the number of boys receiving a superior mixed English and vernacular education has doubled. It should also be added that there were, in 1886-87, 7,678 advanced private schools, attended by 77,379 students learning Persian, Arabic, Sanskrit, or some other Oriental classic. It may, the Governor-General in Council considers, be confidently stated that the progress of secondary education in India during the last five years has been very satisfactory, and that it is now established on a sound and prosperous footing.

Among females, the progress of the higher or secondary education is, of course, much less marked than among males. The secondary schools for girls, which in 1881-82 numbered only 190, attended by 6,366 pupils, had in 1885-86 increased to 349, attended by 23,904 pupils, and in 1886-87 to 357 schools, attended by 24,904 pupils. These figures are only satisfactory because of the promise, slight though it be, which they afford of better things.

11. The third and highest division of the Indian educational system is the Collegiate Section comprising Arts, Law, Medicine, Engineering and teaching. By Collegiate education is to be understood the education of those students who, having successfully passed through the secondary course, are studying in a College, affiliated to the University, one or other of the courses prescribed by the University for its higher examinations. In 1881-82, the number of Colleges in India was 85; and the attendance consisted of 7,582 students. In 1885-86, the number of colleges had increased to 110, and the attendance to 10,538. In the following year, the latest for which statistics are available, there were 114 colleges, attended by 11,501 students. In 1881-82 there were 67 Arts Colleges (English and Oriental) attended by 6,037 students; in 1885-86, 86 Colleges attended by 8,127 students; and in 1886-87, 89 Colleges attended by 8,764 students. Law Colleges numbered in 1881-82, 12 with 739 students; in 1885-86, 16 with 1,371 students; and in 1886-87, the same number of Colleges with 1,602 students. In 1881-82 there were 3 Medical Colleges with 476 students; in 1885-86, also 3 Colleges with 584 students; and in 1886-87 the number of Colleges had risen to 4, and the number of students to 654. Engineering Colleges which in 1881-82 numbered 3 with 330 students rose in 1885-86 to 4 with 447 students; and in 1886-87 while the number of Colleges remained the same as in the previous year, the number of students increased to 474. There was also a College for professional teaching in the Madras Presidency in 1885-86 and 1886-87; the number of students was 9 in the former year and 7 in the latter. The history is thus, from a statistical point of view, one of progressive development.

12. The advance made in the number of schools for special instruction other than training schools has been satisfactory. Medical schools, the course of study in which is not so advanced or thorough as in Medical Colleges, were eleven in number in 1881-82, and were attended by 830 pupils. The number rose in 1885-86 to 16, with 1,227 pupils, and in 1886-87 to 18, with 1,388 pupils. Law Schools had not been established in 1881-82; but four years later there were four such schools attended by 45 pupils. In 1886-87 the schools fell to two, but the students rose to 90. There were only 9 Engineering and Surveying schools in 1881-82, with 310 pupils; but in 1885-86 there were 15, with 558 pupils, and 14 in 1886-87, attended by 616 pupils. Reference will be made in a later portion of this review to the subject of technical education.

13. The foregoing remarks have reference to education generally; but there are two classes in India for whose education it has been at different times suggested that special measures are required. These classes are the children of Europeans and Eurasians, and Muhammadan children. The subject of the education of the children of the domiciled European and Eurasian communities

was excluded from the deliberations of the Education Commission, because it had already received the serious consideration of the Government of India. The conclusion arrived at was that contributions from private sources towards the maintenance of European Schools should be supplemented by grants-in-aid from Government, regulated by the educational progress made by each school, and without reference to denominational distinctions. A School Code embodying these principles was prepared under the circumstances detailed in paragraphs 247-250 of the report of Sir A. Croft. This Code has been extended to the North-Western Provinces and Oudh, the Punjab and the Central Provinces, while portions of it have been introduced into the Code in force in Madras.

14. The records of attendance of European and Eurasian children show that the working of this grant-in-aid system has been productive of satisfactory results. In 1881-82 the number of pupils at school excluding those at private institutions was 18,750; in 1885-86 it had risen to 22,634, and in 1886-87 to 23,031. As the Bengal Code at present stands, the grants are dependent on the results of the annual examination of individuals. The Governor-General in Council does not regard this plan with unalloyed satisfaction, inasmuch as in his opinion experience tends to show that the system under which grants-in-aid are made to depend on examination of each individual student in the school results in pupils being "crammed" for examinations instead of being properly grounded in their studies. Such a system, especially when applied to pupils whose studies have not yet taken any particular direction—in other words, have not been specialized—must, in the opinion of His Excellency in Council, produce a very undesirable effect on the education imparted in this class of schools. The Bombay Code appears to recognise this; and as a remedy it provides for the concession of fixed grants for periods of years. The remedy may not be all that the case requires; in the present condition of education in India, it is impossible to establish a system in which pecuniary considerations shall not influence the teaching or the examination of the pupils; but it is undoubtedly a step in the right direction; and its adoption in other provinces has, therefore, been recommended by the Government of India.

15. Special recommendations for the education of Muhammadans were made by the Education Commission; and the Governor-General in Council, in Home Department Resolution No. 7—215-25 of July 15th, 1885, reviewed the suggestions which had been made for the special treatment of this class. The Commission proposed a differential treatment of the Muhammadan community in respect to education which the Government of India found itself unable to approve. In its Resolution just referred to, the Government of India pointed out that if the Muhammadans desired to succeed in the competition of life with their Hindu fellow subjects, the way lay in taking advantage, in the same manner as other classes do, of the high education provided by the Government. The Governor-General in Council is glad to think that the Muhammadans have themselves adopted this view of the subject. In 1881-82, there were 447,703 Muhammadan pupils; in 1885-86 they numbered 748,663, and in 1886-87, 752,441. The great increase in the first mentioned period must not, however, be taken as shewing that children not previously at school were brought under instruction. The increase is chiefly due to the extension of the State system of education, so as to include schools which were previously outside it. The percentage of Muhammadans to total pupils, which in 1881-82 was only 17·8, stood in 1886-87 at 22·5—practically a ratio identical with the proportion which the Muhammadan population (45 millions) bears to the total population (199 millions) of British India according to the census of 1881. But if this steady and marked advance of the Muhammadan community in regard to education be a gratifying feature of the educational statistics for the past five years, a closer examination of the figures shows much room for improvement. Although the total number of Muhammadans under instruction compares favourably with the total number of Hindus, the number of the former receiving education of an advanced type is very small relatively to the number of Hindus under similar instruction. Out of a total of 2,303,812 Hindus attending all classes of schools private and public, in 1886-87 316,493 were in the secondary stage, while 9,634 were attending College. On the other hand, out of

a total of 752,441 Muhammadans under instruction during the same year, only 58,222 were attending secondary schools, and only 587 attending College. Thus while one out of every seven Hindu students was receiving the higher education, only one out of thirteen Muhammadan students had passed beyond the primary stage. To this condition of things, especially regarding collegiate education, His Excellency in Council would earnestly invite the attention of the Muhammadan community, and would impress on them the necessity of their taking advantage more largely of the educational facilities within their reach. The fact that the attendance of Muhammadan students at secondary schools has since 1881-82 risen from 20,000 to over 58,000 shews, indeed, that progress is being made; but the progress might be more rapid.

16. Passing from the statistics of attendance at the various classes of Indian Schools and Colleges to the expenditure on education, we find that in 1881-82 the total expenditure on public instruction in India was, in round numbers, 186 lakhs of rupees. Four years later (in 1885-86) the total had risen to 240 lakhs; and last year it stood at a little over 252 lakhs. At the beginning of the five years, the Government bore 73 lakhs of this expenditure, while Local and Municipal funds contributed 32 lakhs; the balance of 81 lakhs, consisting of fees, subscriptions, endowments, &c., falling on the public. In the year 1885-86, the share of the Government is shewn at 80 lakhs; that of Local and Municipal bodies at 48; and that of the public at 112 lakhs. The share assigned to Local bodies, however, is not entirely the proceeds of local taxation, but includes an item of $4\frac{1}{2}$ lakhs contributed by Government; so that in effect the share of Government at this period stood at about $84\frac{1}{2}$ lakhs. Next year the shares are shown at $85\frac{1}{2}$ lakhs for Government, 49 lakhs for Local and Municipal Boards, and $117\frac{1}{2}$ lakhs for the Public. But of the 49 lakhs expended by Local bodies, $6\frac{1}{2}$ were contributed by Government; so that there has been a progressive increase in the Government expenditure. The Governor-General in Council considers that the growth of the share borne by Local bodies should for the future exhibit a more marked increase than it has done since 1885; and that there should be a tendency to decrease rather than to increase in the share which now is defrayed from the public treasury.

17. The Government of India recognizes its responsibility to provide, so far as its finances permit, facilities for the education of the people. But in educational, as in all other matters, it is the policy of the Government of India to avoid entering into competition with private enterprise: it pioneers the way; but, having shown the way, it recognizes no responsibility to do for the people what the people can and ought to do for themselves. When, therefore, local effort or private enterprise shows itself able and willing to supply the educational wants of the people in any locality, it is the policy of Government to retire from the field of direct instruction and to help by reasonable subventions of money the operations of independent institutions. Under this policy, it is the aim of the Government also, wherever there is vitality of private effort, to restrict official action to the maintenance of a few schools, in which the system of instruction and discipline shall afford a standard for the emulation of private or aided institutions in the neighbourhood. In pursuance of this policy, the expenditure from Provincial revenues on Government educational institutions should not ordinarily increase in proportion to the total expenditure, but should, rather, be a constantly diminishing quantity, provided that there is the assurance that the ground abandoned by the Government is occupied by local effort.

The gradual substitution of aided for Government schools should, in the opinion of the Government of India, be accompanied by a contraction in the number of pupils educated in the institutions still maintained by Government, more especially the High Schools and Colleges. If the Government High Schools and Colleges are to afford a standard for the emulation of other institutions, it is essential that the number of pupils attending them shall be so limited as to secure to each individual that share of personal attention which is the first requisite of a sound system of education. In giving effect to these views, it is not the wish of the Government of India that the existing accommodation in Government High Schools and Colleges should not be utilized to

the fullest extent ; but it is from this point of view desirable that further expenditure in expanding or increasing the number of such institutions should be incurred by Government only under exceptional circumstances.

18. Passing from the progress of education in its general aspects, the next subject which claims notice is the machinery maintained by Government for imparting instruction in colleges, and for testing the results of the teaching that is given in the schools. At present there is no distinction or line of demarcation between the European Professorial Staff and that engaged on inspection : the same officer may be engaged at one period of his service in the College lecture hall, teaching philosophy or the higher mathematics ; at another period in the camp, inspecting Primary village schools. Gradually, however, it has come to be recognized that the qualities required for the one set of duties are not those required for the other, and that the usefulness of the metaphysician, or the expert in physical science, is impaired, not improved, by testing the knowledge of peasants' children in the rudiments of reading, writing and arithmetic. The Government was gradually coming to the opinion that changes in the form of the Educational Department were demanded by circumstances ; and accordingly the subject formed one of the questions which were referred to the Public Service Commission.

Their opinion, briefly stated, is that the time has come when the system of a close Educational Service, the members of which would be content to enter as young men on small pay, and be ready to take up any duties the Department may assign to them, should be largely modified or entirely discontinued. They have given expression to the view that a close Educational Service in its present form is no longer called for ; and while they recommend the maintenance in each Presidency and large Province of a College, with a staff of Professors capable of teaching up to the highest European literary standards under a European Principal, they consider that the recruitment of Inspectors from Europe should be considerably reduced, and their place taken by local agency. Upon these points, the Government of India has now asked for the advice of Local Governments and Administrations. Without desiring to prejudge the question, the Governor-General in Council is disposed to concur in the necessity for keeping the inspecting agency separate from the teaching staff. Experience seems to show that the work of inspecting, at all events, primary and middle schools can be very thoroughly and satisfactorily performed by local agency ; and as material becomes available in India for this purpose, the reduction of the more expensive graded lists of the superior branch of the Education Department as at present maintained, must of necessity be gradually carried out. Of late years native agency has been utilised to a considerable extent for purposes of inspection ; and proposals to further substitute it for officers recruited in England for the graded list of the Department are now under the consideration of the Government of India.

19. In regard to the question of substituting local agency for European Professors, and Principals of Central Colleges, a different set of considerations arises ; and the Governor-General in Council does not feel assured that the possibility of dispensing with European Professors and Principals of such Colleges of the different Presidencies and Provinces is at present a question for practical discussion. On the question of the recruitment of such Professors for short terms of years, instead of recruiting them as at present for a long period of pensionable service, His Excellency in Council will await the further views of Local Governments ; but, so far as he can at present see, he is inclined to the view that it will be advisable to recommend to the Secretary of State that this system of temporary appointment should be, at all events, tried to a moderate extent. It is very possible that obstacles may be found to exist in the way of the recruitment of specialists of high position for temporary employment in India without securing to them the benefits of leave and absentee allowances. It must also be admitted that a temporary residence in India of even 5 years effects a wrench from English connections and associations, and may affect the prospects of a specialist's ultimate employment in England. There is, on the other hand, in the opinion of the Governor-General in Council, no room for doubt that a Professor permanently settled in India has never the opportunity, nor sometimes the

inclination, to keep himself abreast of the times; and that as education advances in India, the necessity for the employment of Professors who are recognised as specialists in the subjects which they are employed to teach will become more and more necessary. Whether the Government will be able to induce specialists of a high class to accept temporary employment in India or not can only be tested by experiment.

20. Passing from the Professorial and Inspecting Staff to the class of school teachers, it is to be observed that the importance of maintaining properly conducted training schools in order to provide teachers of unquestionable character was insisted on in Home Department circular No. ¹⁰/₂₈₂₋₃₉₁, dated 31st December 1887. The statistics of attendance at these schools deserve notice. In 1881-82 there were in British India only 97 schools for training masters attended by 3,563 pupils, and 16 institutions for training mistresses, attended by 519 pupils. In 1885-86 the numbers were 108 training schools for masters, attended by 4,333 pupils, and 27 for mistresses, attended by 616 pupils. It is true that some advance was maintained in 1886-87 when there were 112 training schools for masters, with 4,444 pupils, and 28 for mistresses attended by 672 pupils; but it is obvious that the progress made has not been great. In a later portion of this Resolution allusion will be made to the orders which have been issued by the Government of India on this important part of the Educational question, and here all that need be said is that the Governor-General in Council trusts that all Local Governments and Administrations will continue to give their special and sustained attention to the subject. At the present time, when there is reason to insist on the maintenance of a stricter system of discipline than has been in force in most Indian schools of recent years, it is more than ever necessary that the men entrusted with the education of the youth of the country should be of unquestionable character trained to habits of teaching and capable of maintaining by their personal influence and other means a high standard of discipline and morality in the schools over which they preside.

21. Paragraphs 104 to 125 of the Report under notice deal with the question of the transfer to Local and Municipal Boards of the administrative control over Primary and Secondary Education. It is to be understood that this administrative control is always exercised in accordance with rules prescribed by Government and subject to the general supervision of the Department of Public Instruction. In some Provinces this transfer has been of a fuller character than in others. For instance, in the Madras Presidency, the Government has, according to Sir Alfred Croft's inquiries, almost retired from the direct management of Primary and Secondary Schools; while in Bombay almost all Primary and about two-thirds of the Secondary Schools have been subordinated to these Boards. In the Punjab also the transfer has extended, practically, to all Primary and Secondary Schools previously managed by the Department. In Bengal, on the other hand, while the transfer of rural schools is as full as in the Provinces mentioned, the case seems different in regard to schools situated in Municipalities. The information furnished in the report as to the extent to which transfers have been made in the North-Western Provinces and Oudh is not precise; but it is understood that the policy adopted there is not different from that followed elsewhere, though as full effect may not have yet been given to it. This qualified transfer of control over education from Government to Local Boards has been accompanied, as shown in paragraphs 16 and 17 above, by no decrease of the Government contributions towards education. The charges on Provincial revenues were not immediately diminished, though it is to be hoped that, gradually, local taxation for the support of Schools will, to a large extent, relieve the general tax-payer. The effect of this establishment of local control should manifest itself not only in such relief to the public finances, but also in the more efficient discharge of those duties of inspection and general supervision which Members of Local Boards will now share with the officers of the Department.

22. In paragraph 12 above reference was made to industrial schools. Upon this subject the Government of India in 1886 circulated a memorandum to all Local Governments and Administrations, in which the

position of industrial schools was set forth, and it was shown that hitherto little progress of a substantial character had been made in promoting technical education. Since then the subject has received much attention both from the public and the various Local Governments. Technical education has been brought into prominence by the pressure of two sets of considerations, which, though cognate, are not identical. In the first place, it had been observed that the object of the Education Despatch of 1854, that "useful and practical knowledge suited to every station in life" should be "conveyed to the great mass of the people" of India, was not being attained by a State education too purely literary, and leading too exclusively to literary culture. It was accordingly recommended by the Education Commission, and accepted by the Government of India as a reform to be desired, that a secondary school course should be introduced, which should fit boys for industrial or commercial careers. This recommendation however, though in the right direction, was wanting in the precision necessary in a working rule; and to give it the requisite definiteness, it was suggested in the memorandum of the Home Department, referred to above, that drawing and the rudiments of the sciences should be taught in all but the most elementary schools; and that generally throughout the educational system the study of natural science and the cultivation of the faculty of observing and reasoning from observation and experiment should be encouraged. In other words, it was suggested that studies which may incline to the application of natural science and to scientific research should not be neglected in favour of literature.

23. The second class of considerations which have forced this question into prominence is concerned with the need of industrial occupation for a population rapidly outgrowing the means of support supplied by a too conservative system of agriculture. It is also concerned with the need for scientific methods to develop the material resources of India and to improve its agriculture, its products and manufactures; so that they may better hold their place in the markets of the world, where competition is carried on with an intensity of purpose, which has been compared to the conditions of warfare. But technical education in this latter sense—that is in the sense of industrial education—is a matter not so easily dealt with as the technical education of the general preliminary character referred to in the preceding paragraph; and it therefore seems desirable that if the present impulse in its favour is to be successfully directed, the conditions of the question should be clearly understood.

24. Technical education proper is the preparation of a man to take part in producing efficiently some special article of commercial demand. It is the cultivation of the intelligence, ingenuity, taste, observation, and manipulative skill of those employed in industrial production, so that they may produce more efficiently. And thus technical education of the special, as contradistinguished from the preparatory, kind is an auxiliary of manufacture and industrial capital. In India at the present time the application of capital to industry has not been developed to the extent which in European countries has rendered the establishment of technical schools on a large scale an essential requisite of success. But the extension of railways, the introduction of mills and factories, the exploration of mineral and other products, the expansion of external trade, and the enlarged intercourse with foreign markets, ought in time to lead to the same results in India as in other countries, and create a demand for skilled labour and for educated foremen, supervisors, and managers. It may be conceded that the effect of these various influences on an Asiatic people is very gradual, and that it would be premature to establish technical schools on such a scale as in European countries, and thereby aggravate the present difficulties, by adding to the educated unemployed a new class of professional men for whom there is no commercial demand. Still a large field is open for the action of Government and public liberality in the direction of promoting special technical education suitable to the immediate requirements of the country and capable of expansion with its growing necessities.

25. The practical conclusion, then, which the Government of India draws from the foregoing premises is, that it should support technical education as an extension of general education in the sense indicated above; and, furthermore,

that it should promote and countenance such technical education of a special character as may be applied to the service of existing industries, which will profit by the aid of scientific research, scientific method, and higher manipulative skill.

The field of operation being thus defined, it would seem necessary to begin with industries which are in some degree centralized, which are growing into importance with the new growth of trade and manufactures, and which are capable of improvement by the application of scientific principles to materials and processes. At the centre of such industries a technical school will be useful. To the great railway workshops and factories may with undoubtedly great advantage be attached schools of drawing and design, and of practical instruction in the scientific principles of the handicrafts there carried on. And probably in large stations and municipal towns there will be a demand which will repay those who acquire in local industrial schools superior skill. If caution at the beginning secures success; if capital is tempted by degrees to launch itself in commercial enterprises and the development of the material resources of the country; if a larger demand for the products of skilled labour springs up—then larger developments of special technical education may be fostered in complete harmony with the sound principle that supply should follow demand.

The subject is of such extreme importance, and the insignificance of what has been attempted in India is so conspicuous, that the Governor-General in Council is deeply impressed with the necessity for action in whatever way may be practicable and sound. Some Local Governments have indeed recently taken practical measures to promote technical education, and these measures have been viewed with much satisfaction by the Government of India. But as it is desirable that the steps best calculated to promote technical education should form the subject of continuous enquiry and discussion, the Governor-General in Council suggests that Local Governments and Administrations should on a convenient but early opportunity take action in two ways. Impressed with the existing want of information at hand as to the extent, character, and circumstances of important local industries in every province of India, His Excellency in Council would, in the first place suggest that in each province an Industrial survey should be completed. In the second place, he would recommend that, with a view to turning the knowledge acquired by such a survey to the best account in the light of the abundant information contained in the Report of the Royal Commission on Technical Education, each Government and Administration should form a committee of educational experts and professional men, who should make suggestions from time to time for the auxiliary supply of appropriate means of technical education; for such modifications of the State system of public instruction as may aid and encourage industries and industrial employment up to the full measure of such requirement at each provincial centre as may be found to exist; and when the circumstances are opportune, for the establishment of a Technological Institute, for the enlargement of the provincial schools of Art and Design, and for the larger co-operation of the University in the promotion of the object in view.

In furtherance of these suggestions, much valuable aid can be rendered by the various Provincial Departments of Land Records and Agriculture upon which the Resolution ⁶₃₄₀₋₅₀ of 8th December 1881 laid the duty of promoting new industries, and of leading the people to a fuller knowledge of agricultural Science.

26. The subject of discipline and moral training in schools and colleges is regarded by the Governor-General in Council as one of the most important questions connected with education in India at the present day. The provisional views of the Government of India on the subject are expressed in the letter No. ⁿ₃₈₂₋₃₉₁ from the Home Department, dated the 31st December 1887, a copy of which has been submitted to Her Majesty's Secretary of State for India.

The replies of Local Governments and Administrations to the Home Department letter of the 31st December last have not yet been received;

and it is therefore premature to make any forecast of what the final orders of the Government of India will be. But the points on which the existing system needs improvement and change may be inferred from the suggestions which His Excellency in Council made for the consideration of Local Governments. These suggestions were—

- (1) The provision of efficient training schools and colleges for teachers and the employment as teachers only of those who have given satisfaction during a course of training :
- (2) the extension of a system of teaching having a direct bearing upon personal conduct :
- (3) the repression of breaches of discipline in accordance with certain well-defined rules :
- (4) the introduction of conduct registers :
- (5) the extension of the hostel or boarding-house system to the fullest extent that the public finances or private liberality will permit :
- (6) the introduction of a system of monitors to be made responsible for the conduct of the scholars while in, and as far as possible while out of, school :
- (7) the exclusion from school of boys who have not reached a certain class by a certain age :
- (8) the introduction of inter-school rules defining the conditions under which students should be allowed to pass from one school to another :
- (9) the opening of playgrounds and gymnasia.

His Excellency in Council also suggested that while the moral supervision by Principals and Professors over students in colleges could best be rendered more effective by the example and personal qualities of the Principal and Professors, it might be possible to supplement this influence by the adoption of rules in support of authority, and the direction which the rules might take was indicated to Local Governments and Administrations. The Governor-General in Council now awaits the replies to these suggestions.

27. It is true, as has been observed in the letter under notice, that, in the case of colleges even more than in the case of schools, doubts have been expressed as to the possibility of introducing distinct moral teaching where there is no religious instruction ; and in their Report the Education Commission point, as a means of meeting the difficulty, to the establishment of aided colleges in which religious teaching can be fully recognized. It is clearly stated in the circular letter from the Home Department that the Governor-General in Council entirely approves of the views of the Education Commission on this point, and would gladly see an increase in the number of aided colleges and schools, in which religious instruction may be freely given. But His Excellency in Council also observed that, though there is greater difficulty in introducing moral teaching into State than into aided colleges, the difficulty does not seem to have been hitherto seriously faced by Education Departments generally ; and until failure follows an earnest effort at imparting moral instruction in colleges, he is unwilling to admit that success may not be secured.

In pursuance of this opinion attention has again been called to the proposal made by the Education Commission that an attempt should be made to prepare a moral textbook, based upon the fundamental principles of natural religion, such as may be taught in all Government and non-Government Colleges. The Government of India and the Secretary of State entertained doubts as to the wisdom of this recommendation at the time when the proposals of the Commission were under consideration ; but circumstances have since occurred which have suggested to both authorities the desirability of making the attempt.

Communications have therefore been recently made to Local Governments with the object of ascertaining the best method by which a moral textbook can be prepared, and the Governor-General in Council has received suggestions on the subject from independent persons interested in the progress of education in India. The subject is still under consideration, and it is unnecessary to allude further to it here.

No. $\frac{7}{245-255}$

ORDER.—Ordered, that copy of the above Resolution be forwarded to the Local Governments and Administrations marginally noted and to the Revenue and Agricultural Department, for information.

Madras. Bombay. Bengal. North-Western Pro- vinces and Oudh. Punjab.	Central Provinces. Burma. Assam. Coorg. Hyderabad.
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Ordered also, that the Resolution be published in the Supplement to the *Gazette of India*.

HOME DEPARTMENT,

EDUCATION;

Simla, 13th July 1888.

(True Extract.)

A. P. MACDONNELL,

Secretary to the Government of India.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending 8 a.m. on
Monday, July 9th, 1888.**

The more favourable rainfall conditions which appeared about the middle of last week and were noticed in the summary last issued, have continued during the week under review. The area of rainfall has not extended much during the past seven days, a large portion of the Punjab, Rajputana, and Sind being still practically rainless; but over other parts of the country the monsoon currents from the Arabian Sea and the Bay of Bengal have prevailed steadily, and though the rainfall accompanying them has in no district been very heavy, the fall has been steady and continuous, and hence probably more beneficial. Past monsoon seasons have shown that the heavy bursts of rain which occasionally occur during the rains are never associated with a regular monsoon current, but almost invariably accompany the development or passage of those cyclonic storms which at times pass from the Bay of Bengal. Hence the heaviest rainfall always occurs during a considerable deflection of the regular monsoon current. In the present week, between the 2nd and 5th of July, a small cyclonic storm travelled from Lower Bengal as far north-west as Lucknow, and during its existence comparatively heavy rain was experienced, the normal monsoon current being deflected towards, and raised within, the storm area. With the disappearance of this storm the wind assumed its normal monsoon directions, and as a consequence the weather of the past week was generally characterised by light rain, much cloud, and a high humidity.

The small storm noticed above was formed over Central Bengal and advanced slowly in a west-north-west direction as far as Lucknow where it filled up. When in the neighbourhood of Allahabad on the 4th and 5th, the depression appeared inclined to intensify, and it at this time looked as though the centre would advance into the Punjab and draw the monsoon current with it well up into North-Western India; but the Chart of the 5th showed that the disturbance had suddenly broken up, and no rain fell in the Punjab except at Simla.

The weather has been very hot and oppressive in the Punjab—more particularly in the Western districts where, as well as in Sind, some very high maximum temperatures were registered during the week.

The most important feature in the weather on the morning of the 2nd was the appearance of a small but distinctly marked depression and cyclonic circulation over Central Bengal. Except in the neighbourhood of this depression very uniform pressures existed over Northern India, but between Sind and Ceylon gradients were very steep. A strong and steady monsoon current blew across the Bombay Coast and penetrated into the Peninsula and Central and part of Upper India. A strong monsoon also prevailed in the Bay, largely due to the indraught towards the depression over Central Bengal. Rain had fallen in most parts of India, except Madras. The largest amounts were reported from the West Coast, but Bengal and Assam also received a good deal of rain, and heavy showers were reported from other parts of the country. Temperature had fallen generally, but maxima of between 106° and 112° were reported from the Indus Valley. By the morning of the 3rd the depression had advanced westward into Central and South Behar. The barometer had consequently risen in Central Bengal and fallen in Behar. Elsewhere the barometric changes were irregular and the distribution practically unchanged, very steep gradients continuing over the Peninsula and central parts of the country. Strong monsoon currents prevailed on both sides of India, and a fairly distinct cyclonic circulation of the wind around the depression. Burma and Eastern India received favourable rains from the Bengal current, and Bombay and Northern India from the Bombay current. The heaviest falls were $3\frac{3}{4}$ inches at Hazaribagh; $4\frac{3}{4}$ inches at Khandwa, and $2\frac{1}{2}$ inches at Jhansi and Benares. Temperature had on the whole fallen, and the maximum in the Punjab was 102° at Peshawar. The Chart of the 4th showed that the depression had advanced to Allahabad, and

had become deeper, but there was little other change. Both monsoons (though weaker than on the two preceding days) were blowing fairly strongly, and a very distinct cyclonic circulation existed around the depression. Rain continued to fall except in North-Western India and the Carnatic, the heaviest falls being in connection with the depression. Sutna, Benares, Lucknow, and Jubbulpore all had about 2 inches. Temperature had risen in the Punjab. On the following day, the 5th, the Chart showed that the depression had drifted slowly west-north-westward without any alteration in its intensity, and lay near Lucknow. There was comparatively little change in the general wind movement. Rain had fallen heavily on the West Coast, moderately heavily in Burma and in the neighbourhood of the depression. The largest falls were $10\frac{3}{4}$ inches at Karwar; $6\frac{1}{2}$ inches at Goa; and 2 inches at Ratnagiri. Diamond Island, Chittagong, and Akyab had over 2 inches; and Mussoorie and Lucknow between $2\frac{1}{2}$ and $2\frac{3}{4}$ inches. On the 6th the depression had disappeared, and the general distribution of pressure approximated closely to the average. Winds were fairly normal, and ordinary monsoon conditions prevailed over the greater part of the country. Little or no rain fell in the Punjab, Rajputana, Sind, Central India, or the Carnatic. Elsewhere rain was general and moderately heavy. On the 7th there was very little change to record in pressure, winds, or weather. A moderate monsoon blew on both sides of India, and ordinary, monsoon conditions prevailed generally. In the Punjab, however, there was still no rain, and temperature there had again become excessive. The average of the maximum readings was 107° , and the highest maximum was $111\cdot5^{\circ}$ at Dera Ismail Khan. The rainfall, though general, was nowhere heavy. A brisk fall of pressure was reported over Northern India on the 8th, and accompanying this fall were stronger monsoon winds on both coasts of India. The rain had been fairly general, except in North-Western India where the weather remained fair, and very high temperatures were reported. In the north and west of the Punjab the average of the maximum readings was 110° . The heaviest falls of rain were 5 inches at Mercara; $4\frac{3}{4}$ inches at Hoshangabad; $3\frac{1}{4}$ inches at Mussoorie, and over 2 inches at Pachmarhi and Seoni.

The concluding table gives the rainfall of the past week. The results are very much more satisfactory than for several weeks past, more than half of the districts showing an excess. In most districts the excess is comparatively small, but in the North-West Provinces, which was the region most affected by the storm noticed above, there are some divisions with more than twice their normal amount. The regions of excessive rain are very well defined: the first includes the greater part of Burma, of Bengal, and of Assam, and extends up the Gangetic plain as far west as the borders of the Punjab; the second includes the West Coast, and extends inland over Khandeish, the Central Provinces, and part of Central India. In all other divisions there has been a deficiency, though, except in the Punjab, this deficiency is not large.

At Kyaukpyu, in Upper Burma, the rainfall of the week amounted to 30 inches, but in other parts of Burma the rain, though fairly steady and continuous, has not been heavy. The same is true of Bengal and Assam, where, as a rule, the total falls during the week vary between 4 and 6 inches. At Cherrapunji the total fall was only 26 inches. In Orissa there is rather a large deficiency. In Behar, the North-Western Provinces and Oudh, several heavy amounts are reported, the totals varying between 4 and 10 inches. In the Punjab the rainfall has been comparatively light, and the average has not been reached, except in the west, but the Province has by no means been without rain, and in some divisions, more particularly the submontane and north-west districts, there have been several heavy falls. In Western India rain has fallen continuously, and in some places heavily. At one station in the Kolhapur district 28 inches of rain were recorded, and several stations had between 10 and 20 inches. In the Berars the rainfall was light, and in the Central Provinces, though the rainfall was continuous and exceeded the average, there were no heavy bursts. In Sind there was no rain, and in Rajputana very little. The Madras Presidency had either no rain or only scattered showers.

The final column of the table shows that there is still very general deficiency in the seasonal rainfall, except in the west, but the amount of the deficiency is steadily decreasing, and, except in North-Western India, is nowhere very large.

Province.	Division.	RAINFALL DATA FOR WEEK ENDING 9TH JULY.			RAINFALL DATA FROM 14TH MAY TO 9TH JULY.		
		Average actual rainfall of division.	Average normal rainfall of division.	Excess or defect, in inches.	Average actual rainfall of season to date.	Average normal rainfall, 14th May to 9th July.	Excess or defect of (seasonal) rainfall expressed as a percentage.
		Inches.	Inches.	Inches.	Inches.	Inches.	%
BURMAH	Tenasserim	10.74	9.11	+1.63	67.70	41.52	+63
	Lower Burma	4.55	5.08	-0.53	32.89	32.21	+2
	Central do.	4.55	3.89	+0.66	23.23	25.70	-10
	Upper do.	1.60	?	?	9.57	?	?
	Arakan	15.58	9.53	+6.05	62.04	72.28	-14
BENGAL AND ASSAM...	Eastern Bengal	3.53	4.48	-0.95	21.00	30.53	-31
	Assam (Surma)	6.18	5.44	+0.74	61.79	44.22	+40
	Do. (Brahmaputra)	4.26	4.84	-0.58	25.70	29.60	-13
	Deltaic Bengal	3.99	2.81	+1.18	12.96	17.06	-24
	Central do.	3.67	3.16	+0.51	13.73	10.54	-17
	North do.	6.91	6.35	+0.56	29.99	38.47	-22
	Orissa	0.86	2.33	-1.47	6.33	13.62	-53
	Chota Nagpur	3.71	2.60	+1.11	9.18	13.01	-29
	Behar (South)	3.66	2.62	+1.04	6.86	10.18	-33
NORTH-WESTERN PROVINCES AND OUDH.	Do. (North)	3.96	3.77	+0.19	12.82	14.15	-9
	North-Western Provinces (East).	4.26	2.25	+2.01	5.64	7.48	-25
	Oudh (South)	5.28	2.25	+3.03	7.37	7.40	0
	Do. (North)	3.75	3.37	+0.38	9.40	10.09	-7
	North-Western Provinces (Central).	5.73	1.75	+3.98	7.47	5.55	+35
	North-Western Provinces (West).	1.33	2.31	-0.98	2.81	6.55	-51
	North-Western Provinces (submontane).	3.63	3.34	+0.29	6.72	9.35	-21
PUNJAB	Punjab (South)	0.72	1.05	-0.33	1.35	3.50	-61
	Do. (Central)	0.81	2.13	-1.32	2.29	6.21	-63
	Do. (submontane)	0.73	2.33	-1.60	2.79	6.22	-55
	Do. (Hill Districts)	1.49	4.71	-3.22	5.58	4.71	+18
	Do. (North-West)	0.42	1.11	-0.69	0.95	3.66	-74
	Do. (West)	0.44	0.40	+0.04	0.83	1.74	-52
BOMBAY AND MALABAR COAST DISTRICTS (MADRAS).	Malabar	9.98	8.47	+1.51	73.69	54.44	+35
	Madras (S. Central)	1.81	0.49	+1.32	10.22	5.37	+90
	Coorg	13.09	11.06	+2.03	42.19	45.12	-6
	Mysore	0.11	1.04	-0.93	2.35	7.84	-70
	Konkan	10.97	7.54	+3.43	49.29	38.84	+27
	Bombay, Deccan	3.68	1.58	+2.10	9.80	9.55	+3
	Hyderabad (North)	...	...	...	...	...	...
CENTRAL PROVINCES AND BERARS.	Khandeish	1.91	1.07	+0.84	6.60	7.71	-14
	Berars	1.70	2.10	-0.40	9.68	9.88	-2
	Central Provinces (West)	3.15	2.58	+0.57	8.63	11.42	-25
	Do. do. (Central)	4.17	3.64	+0.53	9.55	13.64	-30
BOMBAY (NORTH) ...	Do. do. (East)	3.06	2.35	+0.71	8.01	13.00	-38
	Guzerat	1.38	3.42	-2.04	6.35	10.19	-38
	Katliawar	0.03	1.70	-1.69	2.31	3.87	-40
RAJPUTANA AND CENTRAL INDIA.	Sind	0	0.14	-0.14	0.01	0.19	-95
	Central India (East)	3.45	2.32	+1.13	5.31	5.31	0
	Rajputana (East), India (West).	0.32	1.66	-1.34	0.85	4.68	-82
	Rajputana (West)	0	0.53	-0.53	0	2.43	-100
MADRAS	East Coast (North)	0.09	1.16	-0.17	3.35	8.57	-61
	Hyderabad (South)	0.73	1.12	-0.39	9.44	6.30	+50
	Madras (Central)	0.20	0.68	-0.48	2.24	4.82	-54
	East Coast (Central)	0.41	0.79	-0.38	3.79	5.09	-26
	Do. (South)	0.28	0.53	-0.25	2.85	3.86	-26
	Madras (South)	0.07	0.34	-0.27	1.90	2.48	-23

W. L. DALLAS,

for Offg. Meteorological Reporter to the
Government of India.

E. C. BUCK,

Secretary to the Government of India.

SIMLA, 9th July, 1888.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

Weekly Report on the State of the Season and Prospects of the Crops.

Madras.—*For week ending 7th July, 1888.*—Rainfall good on the West Coast, none in Cuddapah and Madras, and slight elsewhere. More rain is wanted in several districts. Crops generally fair, but withering from want of rain in Ganjam, Vizagapatam, Cuddapah, Anantapur, Kurnool, South Arcot, Madura, and Nilgiris. Pasture scanty in Bellary, North Arcot, and Madura. Agricultural operations generally progressing. Prices generally rising except in Godavari, Kistna, and North Arcot. General prospects fair.

Bombay.—*For week ending 11th July, 1888.*—River still low in Sind and preparations for early crops consequently delayed in Shikarpur. Rainfall generally sufficient in Konkan, Khandesh, and parts of the Deccan, but much wanted in Guzerat, Kathiawar, and Baroda; also more wanted in parts of Nasik, Ahmednagar, Sholapur, Belgaum, Bijapur, and Dharwar. Sowing of early crops is progressing in parts of Ahmedabad, Surat, Khandesh, Nasik, Poona, Ahmednagar, Sholapur, Satara, Bijapur, Belgaum, Dharwar, Kathiawar, and Baroda; but retarded in parts where rainfall is insufficient. Rice transplantation progressing in Konkan, Surat, Nasik, and Poona. Fodder scarce in parts of Broach, Surat, Panch Mahals, Nasik, Poona, Belgaum, Kathiawar, and Baroda. Locusts have appeared in four talukas of Hyderabad, slightly damaging indigo in one taluka.

Bengal.—*For week ending 10th July, 1888.*—Ordinary monsoon weather prevails throughout the Province and ample rain has fallen in all parts except Orissa. General prospects have improved and are now satisfactory, but in Orissa more rain is still required. Early rice, jute, indigo, and sugarcane are coming on well. Late rice and *bhadoi* sowings are in progress and transplanting has begun. Price of rice has somewhat risen, particularly in West Bengal, Orissa, and the Chota Nagpur districts.

North-Western Provinces and Oudh.—*For week ending 11th July, 1888.*—Good rain has fallen throughout the Provinces, except in Meerut and Saharanpur, where the weather for the past week has been cloudy and sultry, and more rain is needed. Ploughing and sowing for the *kharif* are in progress. Supplies are sufficient and except in a few districts prices are steady. Condition of agricultural stock is generally satisfactory.

Punjab.—*For week ending 11th July, 1888.*—Rain has fallen in several districts. Prices are generally stationary, except at Shahpur and Peshawar, where they are falling. Ploughings and sowings are in progress except in Umballa, where they have stopped for want of rain. Rain urgently wanted at Hissar and Delhi. *Kharif* crops in good condition. No damage done to crops. Stock cattle are generally healthy. Fodder sufficient except in two districts.

Central Provinces.—*For week ending 11th July, 1888.*—Sufficient rain reported in all districts except Saugor. Autumn sowings progressing favourably. Sugarcane thriving. Condition of cattle fair.

Burma.—*For week ending 9th July, 1888.*—Ploughing and sowing continue. Transplanting has commenced. The rainfall in Lower Burma was generally copious. In Upper Burma it was insufficient and rain is much wanted. The price of paddy has risen in Rangoon, Prome, Bassein, Henzada, Amherst, Tavoy, and has fallen in Thayetmyo and Toungoo. In Upper Burma the prices are stationary.

Assam.—*For week ending 11th July, 1888.*—Weather seasonable. Rainfall general. Early rice being harvested. Cold weather rice sown or transplanted. Prospects good. Some damage done by floods in Nowgong and in parts of Sylhet and Cachar. Tea doing well.

Mysore and Coorg.—*For week ending 11th July, 1888.*—Good rain in Shimoga district, and slight in other parts of the State. Crops generally good, but more rain is much needed for them in parts of the Bangalore, Kolar, Mysore, Tumkur, and Chitaldroog districts. Fodder diminishing in parts of the Hassan and Chitaldroog districts. Prices slightly risen.

Heavy rain has fallen in Coorg.

Berar and Hyderabad.—*For week ending 11th July, 1888.*—Sky generally cloudy. Good rain during the week. Sowing of cotton nearly completed and sowing of *jowari* commenced. Insufficiency of fodder is being reduced. Agricultural stock generally in good condition. No marked change in prices of food-grains.

Some rain in Hyderabad during the week. Agricultural prospects fair. Prices stationary.

Central India.—*For week ending 11th July, 1888.*—Good rainfall throughout the Agency, but not sufficient in Gwalior. Agricultural operations in progress. No other change since last report.

Rajputana.—*For week ending 11th July, 1888.*—Rain still holding off and partial. Agricultural operations commenced, but rain wanted. Agricultural stock good generally. Pasturage or fodder scarce in some places. Prices tending to rise.

Nepal.—*For week ending 5th July, 1888.*—Tolerable rain has fallen lately, but not yet sufficient for the crops. Prospects are indifferent. Transplanting of rice commenced in the valley.

E. C. BUCK,

Secretary to the Government of India.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
RAILWAY TRAFFIC.

No. XI. OF 1888-89.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used, as far as possible.

Latest Return received.	RAILWAYS.	Total mean length open.	RECEIPTS FOR WEEK ENDING 18TH JUNE, 1887.		Total mean length open.	RECEIPTS FOR WEEK ENDING 16TH JUNE, 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 15TH JUNE, 1887.		TOTAL RECEIPTS FROM 1ST APRIL TO 16TH JUNE, 1888.		Total increase in 1888-89.	Total decrease in 1888-89.
			Total.	Per mile open.		Total.	Per mile open.	Total.	Per mile open per week.	Total.	Per mile open per week.		
			Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
<i>State Lines worked by Companies.</i>													
30th June, 1888	East Indian	1,519	8,06,841	590	1,514	8,36,383	553	1,11,31,493	666	1,05,13,406	631	...	6,18,000
30th ditto	Rajputana-Malwa (a)	1,604	3,56,325	214	1,604	3,82,000	230	42,04,490	227	44,22,975	242	1,58,479	...
30th ditto	Sindia	75	8,191	110	75	8,983	120	1,03,082	125	88,000	107	...	14,000
30th ditto	Patna-Gya	57	8,373	146	57	6,871	120	1,04,970	167	98,876	157	...	6,000
23rd ditto	Bengal-Nagpur (b)	186	19,754	106	186	23,788	128	4,84,966	231	4,45,780	218	...	39,000
30th ditto	Dildarnagar-Ghazipur	12	688	57	12	922	77	13,382	101	12,637	96	...	7,000
23rd ditto	Mysore	140	10,324	74	140	10,560	76	1,09,127	69	1,17,778	77	8,651	...
23rd ditto	Southern Mahratta (c)	675	70,934	105	850	70,060	82	7,11,639	101	8,82,010	94	1,70,371	...
30th ditto	Indian Midland	42	2,326	55	136	20,107	148	44,880	95	1,88,589	126	1,43,709	...
16th ditto	Cuddapah-Nellore	...	...	...	...	3,626	44	...	...	44,629	49	44,629	...
23rd ditto	Bareilly-Pilibheet	36	2,047	57	36	1,215	34	23,675	60	19,344	49	...	4,000
23rd ditto	Lucknow-Sitapur-Sihraun	85	4,224	50	105	5,325	51	49,540	56	63,479	55	13,939	...
	TOTAL	4,491	13,79,927	307	4,858	13,69,840	282	1,70,41,250	340	1,68,97,599	316	...	1,43,000
<i>State Lines worked by Government.</i>													
30th June, 1888	North-Western (d)	2,094	4,83,589	231	2,411	4,69,384	195	49,62,991	210	55,26,335	208	5,63,344	...
23rd ditto	Wardha Coal	45	11,995	265	45	12,780	284	1,87,266	369	1,77,912	359	...	9,000
23rd ditto	Bengal Central	125	11,467	92	125	10,805	87	1,49,538	107	1,27,237	93	...	19,000
23rd ditto	Eastern Bengal Railways (e)	645	1,42,069	220	672	1,30,209	207	15,60,136	220	15,77,613	212	17,477	...
23rd ditto	Nalhati	27	1,611	59	27	2,083	76	19,434	65	20,028	67	594	...
23rd ditto	Tirhoot	249	40,340	162	259	31,296	121	3,82,443	140	4,08,670	143	26,227	...
23rd ditto	Burma	333	51,475	155	392	59,499	152	7,19,598	196	7,12,994	175	...	6,000
23rd ditto	Jorhat	26	1,181	45	25	985	39	10,297	31	11,433	34	1,136	...
23rd ditto	Cherra-Companyganj	7	21	3	7	169	23	514	7	894	11	380	...
	TOTAL	3,551	7,43,658	209	3,903	7,26,210	183	79,89,217	200	85,63,116	197	5,73,899	...
<i>Lines worked by Guaranteed Companies.</i>													
23rd June, 1888	Madras	831	1,55,916	188	842	1,64,568	195	18,57,411	198	17,80,210	192	...	77,000
23rd ditto	South Indian	654	1,03,143	158	654	1,06,457	163	11,42,595	155	12,04,907	167	62,312	...
23rd ditto	Great Indian Peninsula	1,497	8,40,239	305	1,497	7,43,859	497	1,25,96,858	743	1,24,35,665	752	...	1,60,000
30th ditto	Bombay, Baroda and Central India	461	2,48,471	539	461	2,33,000	505	39,03,739	750	33,51,788	661	...	5,51,000
23rd ditto	Oudh and Rohilkhand	686	1,14,492	167	693	1,27,962	185	17,10,728	228	17,56,762	230	40,034	...
	TOTAL	4,129	14,68,261	356	4,147	13,75,846	332	2,12,16,731	455	2,05,29,332	450	...	6,97,000
GRAND TOTAL (GUARANTEED AND STATE)													
		12,171	35,91,846	295	12,968	34,71,896	268	4,62,47,198	338	4,59,99,047	322	...	2,57,000
GROSS ESTIMATED EXPENSES													
	
NET RECEIPTS													
		...	...	...	...	...	...	2,61,95,491	191	2,57,66,153	181	...	4,29,000
<i>Assisted Companies.</i>													
23rd June, 1888	Bengal and North-Western	376	50,686	133	376	57,290	152	5,62,358	133	6,36,585	154	74,227	...
30th ditto	Tirakeshwar	22	4,473	201	22	4,907	221	67,591	270	70,618	289	3,027	...
23rd ditto	Rohilkhand-Kumaun	67	5,185	77	67	6,584	98	84,314	114	84,460	115	146	...
9th ditto	Dibru-Sadiya	...	...	...	...	(f)	...	(g) 88,809	110	(h) 83,803	107	...	5,000
	TOTAL	465	60,344	130	465	68,781	148	8,03,072	131	8,75,466	146	72,394	...
<i>Native States.</i>													
23rd June, 1888	The Nizam's (Guaranteed Company)	208	23,691	114	277	30,139	109	3,67,529	157	3,33,274	109	...	34,000
30th ditto	The Gaekwar's	59	2,520	43	59	2,720	46	47,005	71	38,778	60	...	8,000
30th ditto	The Gaekwar's Meh-sana-Vadnagar	21	732	35	21	900	43	9,216	*39	12,474	54	3,258	...
23rd ditto	Bhavnagar-Gondal	193	15,247	79	193	16,955	88	3,36,429	154	2,79,409	132	...	57,000
23rd ditto	Morvi	68	1,942	29	68	3,285	48	46,995	63	54,517	73	7,522	...
30th ditto	Jodhpore	124	7,214	58	124	8,200	66	84,561	60	87,637	64	3,076	...
	TOTAL	673	51,346	76	742	62,199	84	8,91,795	118	8,66,089	99	...	85,700

(a) Includes the Cawnpore-Achnera State Railway.

(b) Includes the Katni-Umaria State Railway.

(c) Includes the Bellary-Kistna State Railway.

(d) Includes the Amritsar-Pathankot and Rajpura-Patiala State Railways.

(e) Includes the Northern Bengal, Dacca, Kaunia-Dharila and Assam-Bihar State Railways.

(f) Return not received.

(g) Total receipts from 1st April to 11th June, 1887.

(h) Total receipts from 1st April to 9th June, 1888.

M. C. BRACKENBURY, Major, R.E.,

Under-Secretary.

SIMLA, 12th July, 1888.



SUPPLEMENT TO
The Gazette of India.

No. 29.} CALCUTTA, SATURDAY, JULY 21, 1888.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.

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GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
Civil Works—Irrigation.

ERRATUM TO THE STATEMENT OF IRRIGATION AND RAINFALL IN THE MADRAS PRESIDENCY FOR 1886-87, PUBLISHED IN THE GAZETTE OF INDIA ON THE 17th DECEMBER, 1887.

Page 1624.—Kurnool Canal. For figures under "Areas Irrigated" substitute the following:—

Works.	Items.	AREAS IRRIGATED.									
		SOWN FROM APRIL TO NOVEMBER 1886, i. e., 1st CROP.			SOWN FROM DECEMBER 1886 TO MARCH 1887, i. e., 2ND CROP.			WHOLE YEAR, 1886-87.			
		Total acres.	In comparison with 1885-86.		Total acres.	In comparison with 1885-86.		Total acres.	In comparison with 1885-86.		Percentage of increase or decrease in 1886-87.
			Increase.	Decrease.		Increase.	Decrease.		Increase.	Decrease.	
1	2	3	4	5	6	7	8	9	10	11	12
Kurnool canal	Kurnool.										
	Government land	10,926	686	...	2,384	...	1,032	13,310	...	346	2'53
	Inam land	5,884	370	...	1,577	...	1,217	7,461	...	847	10'19
	TOTAL	16,810	1,056	...	3,961	...	2,249	20,771	...	1,193	5'43
Total of Kurnool canal and all other works.	Government land	39,013	2,943	...	15,642	619	...	54,655	3,562	...	6'97
	Inam land	25,361	713	...	6,414	...	1,562	31,775	...	849	2'60
	TOTAL	64,374	3,656	...	22,056	...	943	86,430	2,713	...	3'24
Total anicut	Government land	1,390,406	26,054	...	144,477	...	12,154	1,534,883	13,900	...	0'91
	Inam land	355,128	13,900	...	27,217	...	7,139	382,345	6,761	...	1'80
	TOTAL	1,935,979	46,286	...	184,311	...	13,981	2,120,290	32,305	...	1'55
Grand Total including anicuts and other works.	Government land	3,285,177	245,145	...	835,858	...	97,978	4,121,035	147,167	...	3'70
	Inam land	700,485	55,800	...	148,336	...	22,491	848,821	33,309	...	4'08
	TOTAL	4,205,013	310,560	...	1,010,055	...	127,962	5,215,068	188,598	...	3'75

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
Civil Works—Irrigation.

STATEMENTS OF IRRIGATION OPERATIONS IN BENGAL FOR THE KHARIF SEASON OF 1887.

No. I.—Kharif Statement.

GOVERNMENT OF BENGAL, PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH.
IRRIGATION OPERATIONS FOR THE KHARIF SEASON 1887-88 (JULY TO OCTOBER).

Comparative Statement of Irrigation and Rainfall in Canal Districts of Bengal.

DISTRICTS.	Area in acres.	Culturable acres.	AREA IRRIGATED.		1887-88 AS COMPARED WITH 1886-87.		RAINFALL FOR FOUR MONTHS, JULY TO OCTOBER.								REMARKS.		
			Kharif, 1886-87.	Kharif, 1887-88.	Increase.	Decrease.	July.		August.		September.		October.			TOTAL.	
			Acres.	Acres.			1886.	1887.	1886.	1887.	1886.	1887.	1886.	1887.		1886.	1887.
Cuttack	.	.	68,779	89,167	20,388	...	10'53	11'70	7'92	10'56	12'95	7'14	10'74	0'98	In.	In.	30'38
Balasore	.	.	6,490	9,710	3,220	...	8'60	10'85	6'20	12'00	17'33	4'54	5'07	1'78	37'20	29'17	29'17
Midnapore	.	.	68,014	64,885	...	4,029	7'96	10'30	10'47	11'13	9'21	5'04	4'45	3'19	32'09	35'66	35'66
Hooghly	.	.	848	547	...	301	...	...	...	...	...	...	...	...	...	...	...
Gya	.	.	26,293	29,348	3,055	...	20'66	10'34	14'09	10'89	16'86	9'27	5'81	0'73	57'42	31'23	31'23
Patna	.	.	14,872	25,409	10,537	...	22'09	8'04	18'27	5'25	12'11	3'51	5'84	3'20	58'31	20'60	20'60
Shahabad	.	.	181,678	202,773	21,095	...	17'23	7'29	15'28	5'93	14'78	5'06	11'46	5'80	58'75	25'07	25'07
Sarun	.	.	566	5,050	4,484	...	25'62	11'40	11'89	6'95	9'98	2'88	12'23	4'98	58'32	20'18	20'18
TOTAL	368,440	426,889	62,779	4,330	...	...	...	...	...	...	...	...	...	...	...

* Includes 256 acres surreptitiously irrigated.

A. D. MCARTHUR, Major, R. E.,
Under-Secretary to the Government of Bengal, P. W. D.

CALCUTTA,
The 14th June 1888.

No. III.—Kharif Statement.

IRRIGATION OPERATIONS OF FASL KHARIF, 1887-88.

Statement in acres of crops irrigated by Canals in Canal Divisions.

NATURE OF CROPS.	Taldunda Canal.	Kendrapara Canal.	High Level Canal, Range I.	High Level Canal, Range II.	High Level Canal, Range III.	Mishnapore Canal.	Patna Canal.	Arrah Canal.	Buxar Canal.	Sarun Canal.	TOTAL.	REMARKS.
				Acquapadda-Jajepore.		Cossye.	Eastern Sone.	Arrah.	Buxar.	Gunduck.		
Garden and orchards
Sugarcane	60	19	...	92	...	...	4,667	13,610	2,321	...	26,769	...
Cereals
Wheat
Barley
Rice
Miscellaneous
Gram, &c.
Miscellaneous
Fodder crops
Grass, lucerne
Fibres
Cotton
Indigo
Dyes
Turneric, &c.
Opium
Tobacco, &c.
Mustard, &c.
Castor
Oilseeds
Miscellaneous
Hot-weather
TOTAL KHARIF, 1887-88	26,688	60,963	...	11,226	...	65,432	54,757	120,701	82,072	5,050	426,889	...
TOTAL KHARIF, 1886-87	18,566	49,839	...	6,854	...	69,762	41,165	121,680	59,998	566	368,440	...

* Chiefly rice; but as mostly all is under five-year leases, measurements are not made, and details cannot therefore be given.

A. D. McARTHUR, Major, R. E.
Under-Secretary to the Govt. of Bengal, P. W. D.CALCUTTA,
The 14th June 1888.

GOVERNMENT OF INDIA.
REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending 8 a.m. on
Monday, July 16th, 1888.**

The Superintendent of the Peninsular and Oriental Company, Bombay, telegraphed on Monday that the mail steamer *Sutlej* experienced light southerly winds between Aden and Socotra, with a heavy south-easterly swell. Thence to Bombay a fresh to strong monsoon with wind from south-west to west-south-west, with fine weather and occasional light showers. On reaching soundings heavy rain fell at times, and off Bombay continuous heavy rain and thick weather were experienced. This account shows that for the week under review a favourable monsoon was blowing over the Arabian Sea. As is usual under these conditions, strongly marked monsoon weather prevailed over India, more particularly over that part of India directly influenced by the Bombay monsoon current. Within that region strong westerly to south-westerly winds were reported. Not only was this the case on the West Coast, but over the Deccan, Central India, Kathiawar, and at several places in the south of the Peninsula monsoon winds strong to a gale in force were reported on several days. Accompanying these strong winds was general rain, which, though on the whole not very heavy, was fairly continuous and steady. In the earlier part of the week the heaviest falls occurred over the Central parts of the country, but during the 14th, 15th, and 16th heavy falls were recorded all along the West Coast.

In the Bay conditions have been less simple. Early in the week the winds began to fall off at the head of the Bay, and the rainfall brought up by the Bay branch of the monsoon was light. On the 11th the Chart showed a tendency towards the formation of an area of low pressure in the north-west of the Bay. This disturbance slowly developed, and on the 13th a well defined depression was shown off the Ganjam Coast. Very steep gradients prevailed to the south-east of the disturbance, and it is probable that very rough weather was experienced over the centre of the Bay. Early on the morning of the 14th the depression crossed the coast on a north-west course, but the rainfall around the centre was, so far as is known, much lighter than is ordinarily the case under these conditions. On the 15th the depression had reached Nowgong (Central India), and almost filled up.

In Upper India the weather has undergone a considerable change. At first the absence of rain occasioned excessive temperatures in the Punjab and Sind, but about the 11th and 12th there occurred a rush of rain-bearing winds into the Punjab, and a rapid reduction of temperature.

On the morning of the 9th the barometer was falling, except on the West Coast. The change was considerable in the Indus Valley and over the north of the Bay, while it was slight in the extreme south of the Indian region. In consequence gradients had become very steep, and a strong monsoon was blowing very generally, but more especially on the West Coast and in the Central Provinces,

the Deccan, and Rajputana. Temperature had on the whole fallen, except in the Punjab and Upper Sind, where it was excessive, the maximum temperatures being generally above 110° , and at Jacobabad and Dera Ismail Khan 118° and 117° respectively. Rain had fallen in most parts of India, except the Indus Valley and the Punjab. The amount of the rainfall was increasing at the central stations and in parts of the North-West Provinces and Behar. The Chart of the 10th showed an increase of pressure, except in the South. In consequence gradients were somewhat less steep than they were on the 9th, but there was little other change. Strong monsoon winds continued to blow over Western and Central India, but at the head of the Bay the force of the wind had decreased. Temperature had fallen, except in the north and west of the Punjab, where it remained excessive. The rainfall on the West Coast and in Western India varied between $1\frac{1}{2}$ and 3 inches, and moderate falls were reported from parts of Burmah and Northern India. In Bengal only moderate showers were recorded. On the 11th the barometer was falling over the Bay and Eastern India,—rising elsewhere. There was a slight tendency towards the formation of a cyclonic storm in the north-west of the Bay. In consequence the winds were feeble and unsteady about the head of the Bay, though they were probably blowing strongly in the Centre and South. On the West Coast and over the Central parts of the country the strong monsoon winds, noticed during the previous two days, held steadily. Some rain was reported from the north of the Punjab, and showers, light or moderate in amount, were received in most parts of the country, except Sind, West Rajputana, and South Punjab. Temperature had fallen almost everywhere. In the Punjab the reduction was considerable, though high maximum temperatures continued to be reported from the Indus Valley stations. The observations of the 12th showed that a slight depression was forming over the north-west of the Bay off the Ganjam Coast. In other respects the barometric changes were generally unimportant. Over Western and Upper India normal monsoon winds, in the former region—of considerable force—prevailed, while over the Bay there existed a well marked cyclonic circulation around the low pressure area forming there. On the Bengal and Orissa coasts the winds were east-north-easterly. Rain had to a large extent ceased in Bengal, but elsewhere moderately heavy and general rain was reported. Rain had extended well into the north-west of the Punjab, and in consequence there had been a further reduction of temperature in that Province. The Chart of the 13th showed that the depression over the Bay had intensified considerably and was approaching the Ganjam Coast, where it was occasioning a brisk barometric fall. Very steep gradients prevailed to the east and south-east of the disturbance, and a well marked cyclonic circulation of the winds was shown around the storm area. The monsoon winds over Western, Central, and Upper India were practically unchanged. General and favourable rain was reported, the largest amount recorded having been 5 inches at Amraoti. Temperature had decreased, except in Bengal and Behar. High maximum temperatures continued to be reported from the Indus Valley. Early on the morning of the 14th the depression crossed the Ganjam Coast, and the wind shifted to south-west at Gopalpore and False Point. The barometer was falling briskly in the eastern districts of the Central Provinces, but elsewhere the changes were generally slight. A well marked cyclonic circulation existed around the depression, and the south-easterly and easterly current on its northern side extended right up the Gangetic plain into the Punjab. The monsoon on the West Coast was a trifle weaker than during the previous few days, but the rainfall in the

Coast districts continued fairly heavy. Elsewhere rain, though moderate, was very general. Temperature had again decreased. On the 15th the Chart showed that the depression had advanced north-westward, as far as Nowgong (Central India). It had filled up very considerably, but its advance had been attended by a rapid barometric rise in Orissa, Ganjam, and the Circars, and a moderate fall in Bundelkhand. A feeble cyclonic circulation prevailed around the storm area. Very good monsoons were blowing on both coasts. Rain had again fallen very generally, the most important feature of the rainfall being its extension into Cutch, Kathiawar, Guzerat, and parts of Rajputana, and the Punjab, where the amount had hitherto been much short of the average. Temperature changes were slight.

The concluding table shows the rainfall of the past week. In nearly half of the divisions an excess of rain is shown, and in those divisions where a defect is reported the deficiency in most instances is comparatively small and unimportant. The regions of excessive rainfall are roughly Burmah, the west of the North-Western Provinces, the centre and submontane districts of the Punjab, and the greater portion of the Peninsula and of the Central parts of the country. Elsewhere the rainfall has been short of the average, but, except in Bengal and the east of the North-Western Provinces, generally by small amounts.

In Burmah there has been more than the average amount of rain, and falls varying between 18 and 10 inches are reported from several districts. Over Bengal (except North Bengal), Assam, Orissa, Oudh, and the east of the North-Western Provinces there were no heavy falls of rain, and the monsoon current passing over that region seems to have been feeble, as even at Cherrapunji the total fall of the week was only 8 inches. In the central and western parts of the North-Western Provinces the falls were much heavier, varying between 6 and 9 inches, while along the foot of, and on the hills the maximum falls varied between 8 and 15 inches. In the central, submontane, and north-west Punjab rain was general and fairly heavy, but in the south and west there was very little, and in the Derajat, &c., none at all.

In Malabar rain fell daily and at some stations heavily, but on the whole the fall was moderate and about the average. In the Konkan, the Bombay Deccan, the Berars, and a large part of the Central Provinces, the rainfall was much heavier than usual, the maximum falls within those divisions varying between 10 and 20 inches. In Khandesh and Guzerat the total was below the average and there were no heavy falls; but the Kathiawar rainfall was up to the normal, and in Rajputana and Central India the average was exceeded. In Bhopal one station had 8 inches during the week, and at Jeypur over 9 inches was recorded. On the east side of the Peninsula (north of Nellore) rain was general and heavy but in the extreme south there was some deficiency.

The final column of the table shows the state of the seasonal rainfall. More or less deficiency is recorded from the greater part of Northern and a large part of Central India, while in the West and South there has been, so far, more than the normal amount of rain. There has been considerable improvement in Central India and Eastern Rajputana since the previous week. The most serious deficiency is in Orissa and parts of the North-Western Provinces and the Punjab.

Province.	Division.	RAINFALL DATA FOR WEEK ENDING 16TH JULY.			RAINFALL DATA FROM 14TH MAY TO 16TH JULY.		
		Average actual rainfall of division.	Average normal rainfall of division.	Excess or defect, in inches.	Average actual rainfall of season to date.	Average normal rainfall, 14th May to 16th July.	Excess or defect of (seasonal) rainfall expressed as a percentage.
		Inches.	Inches.	Inches.	Inches.	Inches.	%
BURMAH	Tenasserim	16.68	11.50	+5.18	84.38	53.02	+59
	Lower Burma	6.70	4.92	+1.78	39.59	37.12	+7
	Central do.	4.20	3.86	+0.34	26.46	29.56	-10
	Upper do.	2.69	?	?	16.38	?	?
	Arakan	9.16	11.11	-1.95	71.20	83.39	-15
BENGAL AND ASSAM...	Eastern Bengal	1.39	3.71	-2.32	22.39	34.24	-35
	Assam (Surma)	3.73	5.06	-1.33	65.52	49.27	+33
	Do. (Brahmaputra)	2.61	3.44	-0.83	30.53	33.04	-8
	Deltaic Bengal	1.39	2.40	-1.01	14.35	19.46	-26
	Central do.	1.53	2.52	-0.99	15.26	19.06	-19
	North do.	5.29	4.07	+1.22	35.28	42.53	-17
	Orissa	0.90	3.48	-2.58	7.22	17.11	-58
	Chota Nagpur	1.56	2.88	-1.32	10.74	15.89	-32
NORTH-WESTERN PROVINCES AND OUDH.	Behar (South)	1.91	2.29	-0.38	9.93	12.47	-20
	Do. (North)	1.64	2.18	-0.54	14.15	16.33	-13
	North-Western Provinces (East).	1.49	2.80	-1.31	6.36	16.28	-38
	Oudh (South)	1.20	2.54	-1.34	8.56	9.92	-14
	Do. (North)	0.63	2.70	-2.07	9.63	12.80	-25
	North-Western Provinces (Central).	3.95	2.14	+1.81	11.42	7.63	+49
PUNJAB	North-Western Provinces (West).	3.12	1.74	+1.38	5.53	8.29	-28
	North-Western Provinces (Submontane).	4.83	2.75	+2.08	11.92	12.02	-1
	Punjab (South)	0.97	1.01	-0.04	2.32	4.51	-49
	Do. (Central)	2.04	1.55	+0.49	4.33	7.76	-44
	Do. (Submontane)	3.87	1.88	+1.99	6.66	8.10	-18
	Do. (Hill Districts)	4.13	3.78	+0.35	9.70	8.49	+14
BOMBAY AND MALABAR COAST DISTRICTS (MADRAS).	Do. (North-West)	1.05	1.60	-0.55	1.87	5.29	-65
	Do. (West)	0.36	0.52	-0.16	1.19	2.27	-48
	Malabar	6.76	7.20	-0.44	86.45	61.64	+31
	Madras (South Central)	0.61	0.54	+0.07	10.82	5.91	+83
	Coorg	10.17	11.16	-0.99	52.36	59.28	-7
	Mysore	0.30	0.90	-0.60	2.05	8.74	-61
CENTRAL PROVINCES AND BERARS.	Konkan	9.90	7.57	+2.33	59.18	46.41	+28
	Bombay, Deccan	1.74	1.70	+0.04	11.54	11.25	+3
	Hyderabad (North)	...	...	...	...	...	...
	Khandeish	0.68	1.50	-0.82	7.29	9.22	-21
	Berars	5.88	2.56	+3.32	16.30	12.44	+31
	Central Provinces (West)	0.60	2.94	-2.34	15.42	40.31	-7
BOMBAY (NORTH) ...	* Do. (Central)	4.03	3.82	+0.21	13.39	19.6	-31
	Do. (East)	2.20	2.78	-0.58	10.21	15.78	-35
	Guzerat	1.60	3.90	-2.30	8.11	14.09	-42
	Kathiawar	2.28	2.35	-0.07	6.90	6.22	+11
	Sind	?	0.32	?	?	0.51	?
	Central India (East)	2.42	2.28	+0.14	7.73	7.59	+2
RAJPUTANA AND CENTRAL INDIA.	Rajputana (East), Central India (West).	2.89	1.92	+0.97	13.00	6.48	+101
	Rajputana (West)	0.39	0.87	-0.48	?	3.30	?
	East Coast (North)	2.16	1.21	+0.95	6.63	9.78	-32
	Hyderabad (South)	3.29	1.59	+1.70	12.73	7.89	+61
	Madras (Central)	1.51	0.81	+0.70	4.00	5.63	-29
	East Coast (Central)	3.04	0.91	+2.13	6.82	6.00	+14
MADRAS	Do. (South)	0.28	0.49	-0.21	3.13	3.15	-1
	Madras (South)	0.01	0.16	-0.15	2.05	2.63	-22

SIMLA, 16th July, 1888.

W. L. DALLAS,
for Offg. Meteorological Reporter to the
Government of India.

E. C. BUCK,
Secretary to the Government of India.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

Weekly Report on the State of the Season and Prospects of the Crops.

Madras.—*For week ending 14th July, 1888.*—Rainfall good on the West Coast, fair in other districts, except Vizagapatam, Cuddapah, South Arcot, Trichinopoly, Madura, Tinnevely, Coimbatore, and Salem, where more rain is wanted. Crops generally good, but withering from want of rain in Madura and Salem, and blighted in parts of Tinnevely and Coimbatore. Pasture scanty in North Arcot and Madura. Agricultural operations progressing. Prices generally falling where not stationary. General prospects fair.

Bombay.—*For week ending 18th July, 1888.*—Slight rain in parts of Sind, where river continues low. Rainfall during week good throughout Guzerat, Kathiawar, and Konkan, and in Khandesh, Poona, and Dharwar, but insufficient in Ahmednagar, Bijapur, and parts of Nasik, Sholapur, Satara, Belgaum, and Baroda. Sowing of early crops continues in Ahmedabad, Broach, Surat, Khandesh, Nasik, Poona, Ahmednagar, Sholapur, Satara, Bijapur, Kathiawar, and Baroda, but retarded in tracts where rainfall is insufficient. Rice transplantation progressing in Ahmedabad, Surat, Nasik, Konkan, and Baroda. Young crops good, except in parts of Kaira and Upper Sind Frontier, where they are damaged by insects. Fodder scarce in parts of Panch Mahals, Nasik, Belgaum, Kathiawar, and Baroda.

Bengal.—*For week ending 17th July, 1888.*—Ordinary monsoon weather continues, but the rainfall during the week has been moderate. General agricultural prospects are good, except in Orissa and the Singhbhum district, where there has been scanty rain. Early rice, jute, and sugarcane are looking well. Late rice seedlings are being transplanted, but more rain is required. In Behar *bhadoi* sowings are in full progress. Early rice and jute have begun to be gathered in places in East and North Bengal. Indigo manufacture is going on.

North-Western Provinces and Oudh.—*For week ending 18th July, 1888.*—Abundant rain fell during the week in most districts; and only in Rai Bareli, Sitapur, and Aligarh is there any complaint of the supply being insufficient. Ploughing and sowing for the *kharif* are in progress. Sugarcane and indigo are being weeded. Markets are well supplied, and prices generally are steady. The condition of cattle continues satisfactory.

Punjab.—*For week ending 18th July, 1888.*—Rain has fallen in several districts. Prices are unsettled: shown to be rising in Umballa, falling in Peshawar, fluctuating in Delhi; elsewhere reported to be stationary. Ploughing and sowing for *kharif* crops are in progress. More rain wanted at Hissar and Delhi. *Kharif* crops in fair condition. No damage done to crops. Condition of cattle reported to be generally good. Fodder generally sufficient, except in Jullundur and Dera Ismail Khan.

Central Provinces.—*For week ending 18th July, 1888.*—Sufficient rain in all districts, except Bilaspur. Autumn sowings progressing favourably. Rice plants healthy. Sugarcane thriving. Cattle in fair condition.

Burma.—*For week ending 14th July, 1888.*—Ploughing and sowing continue in Lower Burma. The rainfall is sufficient, except in Thayetmyo and in parts of Tharrawaddy. Ploughing is backward in parts of Bhamo and Yeu, as the rain has been insufficient. In Meiktila and Lower Chindwin the rainfall was also very slight. The price of paddy has risen in Yeu, Kyauksee, and Pagan in Upper Burma, and has fallen in Bassein in Lower Burma. Elsewhere prices are stationary.

Assam.—*For week ending 18th July, 1888.*—Rainfall general, but light. Reaping of early and transplanting of late rice continues. Growing crops doing well. More sun wanted for tea in Upper Assam.

Mysore and Coorg.—*For week ending 18th July, 1888.*—Some rain in the civil and military station. Good rain reported in Shimoga, Kadur, and Hassan districts. Standing crops generally in good condition, but want of more rain still felt in affected parts of all districts, except Shimoga and Kadur. In one taluk of the Hassan district crops are reported to be damaged by insects. Outturn of harvests fair.

Moderately heavy rain in Coorg during the week. Cultivation of paddy backward in three taluks.

Berar and Hyderabad.—*For week ending 18th July, 1888.*—Weather warm and cloudy. Rainfall during the week good. Sowing of cotton completed, and the plants are some inches above the ground. Sowing of *jowari* continues. Agricultural stock generally in good condition. Fodder plenty, except in Amraoti district, where it will be sufficient in a few days. Prices of foodgrains stationary.

Some rain during the week in Hyderabad. Agricultural prospects fair. Prices stationary.

Central India.—*For week ending 18th July, 1888.*—Rain general, but insufficient in Neemuch. Agricultural operations are in progress. Great scarcity of pasturage in Neemuch.

Rajputana.—*For week ending 18th July, 1888.*—Rainfall more or less throughout the Province. Agricultural operations commenced. Agricultural stock good generally. Fodder scarce in some places. Prices steady, but rising in some places.

Nepal.—*For week ending 12th July, 1888.*—There has been some rain during the week, but more and heavy rain still wanted. Weather hot. Prospects improved. Transplantation of winter rice is in progress.

E. C. BUCK,

Secretary to the Government of India.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
RAILWAY TRAFFIC.

No. XII. OF 1888-89.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used, as far as possible.

Latest Return received.	RAILWAYS.	Total mean length open.	RECEIPTS FOR WEEK ENDING 25TH JUNE, 1887.		Total mean length open.	RECEIPTS FOR WEEK ENDING 23RD JUNE, 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 25TH JUNE, 1887.		TOTAL RECEIPTS FROM 1ST APRIL TO 23RD JUNE, 1888.		Total increase in 1888-89.	Total decrease in 1888-89.
			Total.	Per mile open.		Total.	Per mile open.	Total.	Per mile open per week.	Total.	Per mile open per week.		
			Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
	<i>State Lines worked by Companies.</i>												
ly, 1888	East Indian	1,519	7,44,366	490	1,514	8,53,463	564	1,18,75,859	652	1,13,66,869	626	...	5,08,990
ditto	Rajputana-Malwa (a)	1,664	3,64,804	183	1,664	4,01,000	241	45,69,300	224	48,30,751	242	2,61,451	...
ditto	Sindia	75	6,370	85	75	9,065	121	1,09,432	122	97,161	108	...	12,291
ditto	Patna-Gya	57	9,278	145	57	8,699	152	1,13,248	165	1,07,575	157	...	5,673
ne, 1888	Bengal-Nagpur (b)	186	14,432	78	186	26,000	140	4,99,307	218	4,72,022	211	...	27,375
ly, 1888	Dildarnagar-Ghazipur	12	711	59	12	781	65	14,093	98	13,418	93	...	675
ne, 1888	Mysore	140	8,374	60	140	9,294	67	1,18,784	69	1,27,072	70	8,288	...
ly, 1888	Southern Mahratta (c)	675	72,133	107	850	74,756	88	7,71,392	100	9,56,766	94	1,85,374	...
ne, 1888	Indian Midland	42	2,820	67	136	20,757	153	47,700	92	2,09,092	128	1,61,392	...
ditto	Cuddapah-Nellore	...	...	...	83	8,360	101	...	...	53,166	53	53,166	...
ne, 1888	Bareilly-Pilibheet	36	1,666	46	36	1,421	39	25,341	59	20,682	48	...	4,659
ditto	Lucknow-Sitapur-Sihraun	85	4,193	49	105	5,244	50	53,732	56	68,606	54	14,874	...
	TOTAL	4,491	11,68,147	260	4,858	14,18,840	291	1,81,98,298	334	1,83,23,180	314	1,24,882	...
	<i>State Lines worked by Government.</i>												
ly, 1888	North-Western (d)	2,094	3,90,413	186	2,411	4,76,977	198	53,53,404	208	60,03,312	207	6,49,908	...
ne, 1888	Wardha Coal	45	14,769	328	45	11,309	251	2,02,035	365	1,87,432	347	...	14,603
ditto	Bengal Central	125	17,136	137	125	21,322	171	1,63,074	109	1,47,878	99	...	15,796
ditto	Eastern Bengal Railways (e)	645	1,67,335	259	672	1,60,145	238	17,27,491	223	17,34,550	214	7,059	...
ditto	Nalhati	27	2,165	79	27	2,871	105	21,599	66	20,828	64	...	771
ditto	Tirhoot	249	35,479	142	259	33,097	128	4,17,922	140	4,49,853	145	31,931	...
ditto	Burma	333	45,877	138	392	59,772	152	7,65,475	192	7,73,901	173	8,426	...
ditto	Jorhat	26	810	31	25	1,323	52	11,107	31	12,756	36	1,649	...
ditto	Cherra-Comanyganj	7	46	7	7	144	19	560	7	1,038	12	478	...
	TOTAL	3,551	6,74,030	190	3,963	7,66,960	194	86,63,267	199	93,31,548	197	6,68,281	...
	<i>Lines worked by Guaranteed Companies.</i>												
June, 1888	Madras	831	1,50,743	181	842	1,72,705	206	20,08,154	197	19,57,992	194	...	50,162
ditto	South Indian	654	95,451	146	654	1,10,563	169	12,38,046	154	13,16,138	168	78,092	...
ditto	Great Indian Peninsula	1,497	6,73,175	450	1,497	6,30,995	422	1,32,69,433	719	1,30,67,288	725	...	2,02,145
July, 1888	Bombay, Baroda and Central India	461	2,28,324	495	461	2,27,000	492	41,32,063	730	36,03,748	651	...	5,28,315
June, 1888	Oudh and Rohilkhand	686	99,814	146	693	1,34,034	193	18,16,543	221	18,93,035	228	76,492	...
	TOTAL	4,129	12,47,507	302	4,147	12,75,297	308	2,24,64,239	443	2,18,38,201	439	...	6,26,038
	AND TOTAL (GUARANTEED AND STATE)	12,171	30,89,684	254	12,968	34,61,097	267	4,93,25,804	331	4,94,92,029	318	1,67,125	...
	GROSS ESTIMATED EXPENSES	...	...	...	...	...	...	2,16,70,701	146	2,19,19,832	141	...	...
	NET RECEIPTS	...	...	...	...	...	...	2,76,55,103	185	2,75,73,097	177	...	82,006
	<i>Assisted Companies.</i>												
June, 1888	Bengal and North-Western	376	67,400	179	376	50,770	135	6,29,758	136	6,87,355	152	57,597	...
July, 1888	Tarakeshwar	22	5,530	249	22	8,129	305	73,121	274	78,747	295	5,626	...
June, 1888	Rohilkhand-Kumaun	67	6,342	95	67	7,514	112	90,656	113	91,743	114	1,087	...
ditto	Dibru-Sadiya	78	7,988	102	78	8,541	110	1,04,771	109	1,00,777	108	...	3,994
	TOTAL	543	87,260	161	543	74,954	138	8,98,306	134	9,58,622	147	60,316	...
	<i>Native States.</i>												
June, 1888	The Nizam's (Guaranteed Company)	208	64,852	312	277	30,979	112	4,32,381	160	3,64,253	110	...	68,128
July, 1888	The Gaekwar's	59	1,963	33	59	2,520	43	49,028	68	41,621	59	...	7,407
ditto	The Gaekwar's Meh-sana-Vadnagar	21	747	36	21	1,100	52	9,963	39	13,838	56	3,875	...
June, 1888	Bhavnagar-Gondal	193	12,947	67	193	15,952	83	3,49,376	147	2,96,862	128	...	52,514
ditto	Morvi	68	2,123	31	68	2,615	38	49,118	60	56,846	70	7,728	...
July, 1888	Jodhpore	124	7,332	59	124	9,300	75	91,893	60	97,503	66	5,610	...
	TOTAL	673	89,964	134	742	62,466	84	9,81,759	119	8,70,923	98	...	1,10,836

(a) Includes the Cawnpore-Achnera State Railway.
(b) Includes the Katni-Umaria State Railway.
(c) Includes the Bellary-Kistna State Railway.

(d) Includes the Amritsar-Pathankot and Rajpura-Patiala State Railways.
(e) Includes the Northern Bengal, Dacca, Kaunia-Dharila and Assam-Behar State Railways.

M. C. BRACKENBURY, Major, R.E.,
Under-Secretary.

4, 19th July, 1888.

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SUPPLEMENT TO
The Gazette of India.

No. 30.} CALCUTTA, SATURDAY, JULY 28, 1888.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.

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GOVERNMENT OF INDIA.
DEPARTMENT OF FINANCE AND COMMERCE.
RETAIL PRICES FOR THE 2nd HALF OF JUNE 1888.

DISTRICTS.	QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.															AVERAGE WAGES PER MONTH.															
	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLU (<i>Sorghum vulgare</i>).		BAJRA OR CUMBU (<i>Penisetum typhoides</i>).		MARUA OR RAGI (<i>Elysinetum cana</i>).		KANGNI, OR KAKUM, ITALIAN MILLET (<i>Setaria italica</i>).		GRAM, CHENNA, CHOLA, KADALAY OR SUNAGA (<i>Cicer arietinum</i>).		MAIZE (<i>Zea Mays</i>).		ARHAR OR THUR CADIAN PEA (<i>Caninus indicus</i>).		FIREWOOD.		SALT.		Able-bodied Agricultural labourer.	Swee or Horse-keeper.	Common Mason, Carpenter or Blacksmith.		
	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.				R a. p.	R a. p.
MADRAS.																															
Ganjam	10 5	10 5	15 6	15 6	16 5	16 5	23 13	22 11	22 13	22 13	30 13	29 5	...	...	...	...	...	...	...	...	104 6	104 6	10 5	10 5	...	...	...	...	...	...	...
Vizagapatnam	15 0	15 0	16 13	16 13	18 0	18 0	26 14	25 14	25 14	25 14	29 2	29 2	...	...	...	...	...	...	...	...	116 10	116 10	10 5	10 5	...	...	...	...	...	...	...
Godavari	11 11	12 10	13 11	13 11	14 11	14 11	22 2	22 2	22 2	22 2	27 5	27 10	...	...	...	...	...	...	...	...	157 14	157 14	13 3	13 3	...	...	...	...	...	...	...
Kistna	9 14	9 11	13 11	13 11	14 11	14 11	22 2	22 2	22 2	22 2	30 0	30 0	...	...	...	...	...	...	...	...	140 0	140 0	12 10	12 10	...	...	...	...	...	...	...
Nellore	10 13	10 13	13 11	13 11	14 11	14 11	22 2	22 2	22 2	22 2	30 0	30 0	...	...	...	...	...	...	...	...	145 13	145 13	11 14	11 14	...	...	...	...	...	...	...
Cuddapah	14 0	13 0	13 11	13 11	14 11	14 11	22 2	22 2	22 2	22 2	34 0	34 0	...	...	...	...	...	...	...	...	97 3	97 3	11 14	11 14	...	...	...	...	...	...	...
Anantapur	11 8	11 6	13 11	13 11	14 11	14 11	22 2	22 2	22 2	22 2	38 13	36 14	...	...	...	...	...	...	...	...	124 10	124 10	11 5	11 5	...	...	...	...	...	...	...
Bellary	13 0	13 0	13 11	13 11	14 11	14 11	22 2	22 2	22 2	22 2	38 13	36 14	...	...	...	...	...	...	...	...	88 11	88 11	12 5	12 5	...	...	...	...	...	...	...
Kurnool	11 6	11 6	13 11	13 11	14 11	14 11	22 2	22 2	22 2	22 2	38 13	36 14	...	...	...	...	...	...	...	...	97 3	97 3	12 6	12 6	...	...	...	...	...	...	...
Madrass	10 10	10 10	13 11	13 11	14 11	14 11	22 2	22 2	22 2	22 2	34 3	34 3	...	...	...	...	...	...	...	...	200 0	200 0	11 11	11 11	...	...	...	...	...	...	...
Chingleput	9 11	9 11	13 11	13 11	14 11	14 11	22 2	22 2	22 2	22 2	34 3	34 3	...	...	...	...	...	...	...	...	166 3	166 3	12 0	12 0	...	...	...	...	...	...	...
North Arcot	8 13	8 13	13 11	13 11	14 11	14 11	22 2	22 2	22 2	22 2	34 3	34 3	...	...	...	...	...	...	...	...	143 6	143 6	12 10	12 10	...	...	...	...	...	...	...
South Arcot	8 13	8 13	13 11	13 11	14 11	14 11	22 2	22 2	22 2	22 2	34 3	34 3	...	...	...	...	...	...	...	...	131 3	131 3	12 14	12 14	...	...	...	...	...	...	...
Tanjore	8 13	8 13	13 11	13 11	14 11	14 11	22 2	22 2	22 2	22 2	34 3	34 3	...	...	...	...	...	...	...	...	133 10	133 10	11 11	11 11	...	...	...	...	...	...	...
Trichinopoly	8 13	8 13	13 11	13 11	14 11	14 11	22 2	22 2	22 2	22 2	34 3	34 3	...	...	...	...	...	...	...	...	161 13	161 13	9 3	9 3	...	...	...	...	...	...	...
Madura	9 14	9 14	13 11	13 11	14 11	14 11	22 2	22 2	22 2	22 2	34 3	34 3	...	...	...	...	...	...	...	...	186 10	186 10	13 8	13 8	...	...	...	...	...	...	...
Tinnevely	8 13	8 13	13 11	13 11	14 11	14 11	22 2	22 2	22 2	22 2	34 3	34 3	...	...	...	...	...	...	...	...	121 8	121 8	12 11	12 11	...	...	...	...	...	...	...
Coimbatore	8 13	8 13	13 11	13 11	14 11	14 11	22 2	22 2	22 2	22 2	34 3	34 3	...	...	...	...	...	...	...	...	140 14	140 14	11 11	11 11	...	...	...	...	...	...	...
Nilgiris	8 13	8 13	13 11	13 11	14 11	14 11	22 2	22 2	22 2	22 2	34 3	34 3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Salem	8 2	8 2	13 10	13 10	14 11	14 11	22 2	22 2	22 2	22 2	34 3	34 3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Canara	8 10	8 10	13 13	13 13	14 13	14 13	22 2	22 2	22 2	22 2	34 3	34 3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malabar	8 10	8 10	13 13	13 13	14 13	14 13	22 2	22 2	22 2	22 2	34 3	34 3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
BOMBAY.																															
Bombay	10 0	9 15	16 12	16 12	17 2	17 2	24 13	23 13	23 13	23 13	27 5	27 5	...	...	...	...	...	...	...	...	67 1	67 1	11 3	11 3	...	...	...	...	...	...	...
Dakrohi	10 0	11 0	17 0	17 0	18 0	18 0	24 13	23 13	23 13	23 13	27 5	27 5	...	...	...	...	...	...	...	...	8 0	8 0	9 8 0	9 8 0	...	...	...	...	...	...	...
Kaira	13 14	13 14	20 0	20 0	21 0	21 0	24 13	23 13	23 13	23 13	27 5	27 5	...	...	...	...	...	...	...	...	7 8 0	7 8 0	8-0 to 10-0	8-0 to 10-0	...	...	...	...	...	...	...
Surat	13 0	13 0	14 0	14 0	15 0	15 0	24 13	23 13	23 13	23 13	27 5	27 5	...	...	...	...	...	...	...	...	7 8 0	7 8 0	15 0 0	15 0 0	...	...	...	...	...	...	...
Broach	13 0	13 0	14 0	14 0	15 0	15 0	24 13	23 13	23 13	23 13	27 5	27 5	...	...	...	...	...	...	...	...	7 8 0	7 8 0	15 0 0	15 0 0	...	...	...	...	...	...	...
Tanna (Salsette)	9 4	9 4	13 0	13 0	14 0	14 0	24 13	23 13	23 13	23 13	27 5	27 5	...	...	...	...	...	...	...	...	5 10 0	5 10 0	10 0 0	10 0 0	...	...	...	...	...	...	...
Colaba (Athag)	15 15	15 15	20 0	20 0	21 0	21 0	24 13	23 13	23 13	23 13	27 5	27 5	...	...	...	...	...	...	...	...	8 0	8 0	15-0 to 20-0	15-0 to 20-0	...	...	...	...	...	...	...
Khandesh (Dhulia)	15 15	15 15	20 0	20 0	21 0	21 0	24 13	23 13	23 13	23 13	27 5	27 5	...	...	...	...	...	...	...	...	8 0	8 0	15-0 to 20-0	15-0 to 20-0	...	...	...	...	...	...	...
Nasik	13 4	13 4	17 4	17 4	18 4	18 4	24 13	23 13	23 13	23 13	27 5	27 5	...	...	...	...	...	...	...	...	7 0 0	7 0 0	20-0 to 25-0	20-0 to 25-0	...	...	...	...	...	...	...
Ahmednagar	11 8	11 8	17 4	17 4	18 4	18 4	24 13	23 13	23 13	23 13	27 5	27 5	...	...	...	...	...	...	...	...	7 0 0	7 0 0	20-0 to 25-0	20-0 to 25-0	...	...	...	...	...	...	...
Poona (City)	14 8	14 8	18 4	18 4	19 4	19 4	24 13	23 13	23 13	23 13	27 5	27 5	...	...	...	...	...	...	...	...	7 0 0	7 0 0	20-0 to 25-0	20-0 to 25-0	...	...	...	...	...	...	...
Sholapur	16 2	16 2	20 0	20 0	21 0	21 0	24 13	23 13	23 13	23 13	27 5	27 5	...	...	...	...	...	...	...	...	7 0 0	7 0 0	20-0 to 25-0	20-0 to 25-0	...	...	...	...	...	...	...
Bijapur	11 3	11 3	15 1	15 1	16 1	16 1	24 13	23 13	23 13	23 13	27 5	27 5	...	...	...	...	...	...	...	...	6 0 0	6 0 0	17-0 to 19-0	17-0 to 19-0	...	...	...	...	...	...	...
Satara	11 3	11 3	15 1	15 1	16 1	16 1	24 13	23 13	23 13	23 13	27 5	27 5	...	...	...	...	...	...	...	...	6 0 0	6 0 0	17-0 to 19-0	17-0 to 19-0	...	...	...	...	...	...	...
Belgaum	14 0	14 0	18 0	18 0	19 0	19 0	24 13	23 13	23 13	23 13	27 5	27 5	...	...	...	...	...	...	...	...	8 0	8 0	22-8 to 27-0	22-8 to 27-0	...	...	...	...	...	...	...
Dharwar (Habb)	14 0	14 0	18 0	18 0	19 0	19 0	24 13	23 13	23 13	23 13	27 5	27 5	...	...	...	...	...	...	...	...	8 0	8 0	22-8 to 27-0	22-8 to 27-0	...	...	...	...	...	...	...

[illegible]

* In common use.
† Not procurable.
‡ Not available.

a In sub-divisions retail prices of salt per rupee are :—Culina 10-8 sers, Cutwa 10-11 sers, and Naneengunge 10 sers.
b At Rampore Haut retail prices of salt 11-4 sers per rupee.
c In sub-divisions retail prices of salt per rupee are :—Contal 10 sers, Tumlook 8 sers, and Ghattal 11-4 sers.
d In sub-divisions retail prices of salt per rupee are :—Serampore 10 sers and Jehanabad 10-8 sers.
e In sub-divisions retail prices of salt per rupee are :—Baraset, Basirhat, and Diamond Harbour (at Kulphat) 9 sers; Barrackpore 9-2 sers, and Dum-Dum 10 sers.
f In sub-divisions retail prices of salt per rupee are :—Koochitca and Rainsaghat 10 sers, and Meherpore and Chooa-danga 10-8 sers.
g In sub-divisions retail prices of salt per rupee are :—Sathkira 9 sers 2 chittacks and Bagritar 8 sers.
h In sub-divisions retail prices of salt per rupee are :—Jumdiyah and Magura 9 sers, Narail 7½ sers, and Bongong 10 sers.
i In sub-divisions retail prices of salt per rupee are :—Kandi 11 sers and Junigpore 10 sers.

i In the Thakurgaon sub-division retail price of salt 8 sers per rupee.
j In the sub-divisions retail prices of salt per rupee are :—Nargore 9-12 sers and Nowgong 9-9 sers.
k In sub-divisions retail prices of salt per rupee are :—Kurigram 9 sers, Nilphamari 10 sers, and Guibanda 7-3 sers.
l In the Serailunge sub-division retail price of salt 10-8 sers per rupee.
m At Fallakoota in the Alipore sub-division retail price of salt 8 sers per rupee.
n In sub-divisions retail prices of salt per rupee are :—Manickunge and Narainunge 9 sers, and Munshingunge 8-14 sers.
o In sub-divisions retail prices of salt per rupee are :—Patakhali 8 sers, Porosore 9 sers, and Bhola 10-8 sers.
p In sub-divisions retail prices of salt per rupee were :—Kishoregunge, Jamalpore and Sherepore 8 sers, Atter 10 sers, and Netrokona 9 sers.
q At Cox's Bazar retail price of salt 8 sers per rupee.
r At Panchagachia Hat in the Fenny sub-division retail price of salt 8 sers per rupee.

RETAIL PRICES FOR THE 2nd HALF OF JUNE 1888—continued.

DISTRICTS.	QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.															AVERAGE WAGES PER MONTH.	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Agricultural labourer.	Syce or Horse-keeper.
	WHEAT.	BARLEY.	RICE, BEST SORT.	RICE, COMMON.	JOWAR OR CHOLAM (<i>Sorghum vulgare</i>).	BAJRA OR CUMBU (<i>Pennisetum typhoides</i>).	MARUA OR RAGI (<i>Echinochloa crus-galli</i>).	KANGNI OR KAKRI, ITALIAN MILLET (<i>Setaria italica</i>).	GRAM, CHENNA, CHOLA, KADALAY OR SURAGA (<i>Cicer arietinum</i>).	MAIZE (<i>Zea Mays</i>).	ARHAR OR THUR CADIAN PEA (<i>Cajanus indicus</i>).	FIREWOOD.	SALT.				
	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	R. a. p.	R. a. p.
BENGAL—continued.																	
Eastern Districts—continued.																	
Tipperah	12 8 12 8	...	...	...	...	...	...	...	14 4 14 4	...	10 0 10 0	...	...	8 0 8 0	7-0 to 10-0	7-0 to 8-0	8-0 to 15-0
Chittagong Hill Tracts	...	...	...	...	...	...	...	...	12 0 12 0	...	12 0 12 0	...	...	8 0 8 0	9 0 9 0	6 0 6 0	15 0 0
Hill Tipperah	8 0 8 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Behar.																	
Patna	19 0 19 0	25 0 25 0	11 8 11 8	19 0 19 0	...	...	...	...	24 0 24 0	...	...	...	...	10 0 10 0	8 0 8 0	3-0 to 5-0	...
Gya	17 0 17 0	21 0 21 0	11 0 11 0	16 0 16 0	...	...	...	...	23 0 23 0	...	...	...	...	...	...	...	...
Shahabad	16 12 17 0	22 0 22 0	12 0 12 0	15 0 15 0	...	...	...	...	23 0 23 0	...	...	...	...	...	...	...	...
Durbhanga	17 0 17 0	22 0 22 0	12 0 12 0	15 0 15 0	...	...	...	...	23 0 23 0	...	...	...	...	...	...	...	...
Monrampur	16 0 16 0	20 0 20 0	12 0 12 0	15 0 15 0	...	...	...	...	23 0 23 0	...	...	...	...	...	...	...	...
Samt	17 0 17 0	22 0 22 0	12 0 12 0	15 0 15 0	...	...	...	...	23 0 23 0	...	...	...	...	...	...	...	...
Chunpur	17 0 17 0	22 0 22 0	12 0 12 0	15 0 15 0	...	...	...	...	23 0 23 0	...	...	...	...	...	...	...	...
Monghyr	17 13 17 12	24 0 24 0	13 13 13 13	17 0 17 0	...	...	...	...	23 0 23 0	...	...	...	...	...	...	...	...
Bhagalpur	17 10 18 4	25 0 25 0	13 13 13 13	17 0 17 0	...	...	...	...	23 0 23 0	...	...	...	...	...	...	...	...
Purneah	20 0 20 0	...	...	...	...	...	...	...	23 0 23 0	...	...	...	...	...	...	...	...
Maidah	17 8 18 0	...	...	...	...	...	...	...	23 0 23 0	...	...	...	...	...	...	...	...
Sonthal Pergunnahs	13 0 13 0	...	...	...	...	...	...	...	23 0 23 0	...	...	...	...	...	...	...	...
Orissa.																	
Cuttack	11 13 10 8	...	...	...	...	...	...	...	15 12 18 6	...	...	...	...	...	...	5 10 0	4 0 0
Pooree	10 8 13 2	...	...	...	...	...	...	...	17 1 18 6	...	...	...	...	...	...	6 0 0	5 0 0
Balasore	15 0 15 0	13 0 13 0	13 0 13 0	13 0 13 0	...	...	...	...	17 0 16 0	...	...	...	...	...	...	5-10 to 7-8	4-0 to 6-0
CHOTA NAGPORE.																	
South-Western Frontier Agency.																	
Hazárbagh	13 0 13 0	17 0 17 0	7 0 7 0	8 0 8 0	...	...	...	...	16 0 18 0	...	...	...	...	...	...	3 12 0	5 0 0
Lehardugga	18 0 12 0	...	...	...	...	...	...	...	18 0 18 0	...	...	...	...	...	...	3-4 to 6-0	4-11 to 14-1
Singhoom	12 0 12 0	16 0 16 0	12 0 12 0	12 0 12 0	...	...	...	...	14 0 14 0	...	...	...	...	...	...	3 0 0	5 0 0
Manhoom	13 5 13 5	...	...	...	...	...	...	...	17 0 17 0	...	...	...	...	...	...	4 3 6	5 0 0
ASSAM.																	
Sylhet	15 0 15 0	...	...	...	...	...	...	...	18 4 19 0	...	...	...	...	...	...	5 0 0	6-0 to 7-0
Cachar	10 0 10 0	...	...	...	...	...	...	...	16 0 16 0	...	...	...	...	...	...	6-0 to 7-0	7-0 to 8-0
Godárá	8 0 8 0	...	...	...	...	...	...	...	16 0 16 0	...	...	...	...	...	...	5-10 to 7-8	7-8 to 12-0
Gáro Hills	8 0 8 0	...	...	...	...	...	...	...	16 0 16 0	...	...	...	...	...	...	7-0 to 8-0	8-0 to 10-0
Kamrup	20 0 20 0	...	...	...	...	...	...	...	16 0 16 0	...	...	...	...	...	...	5-0 to 7-0	6-0 to 10-0
Darrang	17 0 17 0	...	...	...	...	...	...	...	12 0 12 0	...	...	...	...	...	...	6-0 to 15-0	8-0 to 12-0

[illegible]

... each (% Range) 9-12 sers.

+ No sales in market.

5. In Khoordah sub-division retail price of salt 8 sers per rupee.

At Bhudruck retail price of salt 7-14 sers per rupee.

32 At Daitungang, retail price of salt 8 sers per rupee.

* Not procurable.

of sers, and Buxar 10 sers.

100

Sitamarni 10 sets.

Amuñoz sers.

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RETAIL PRICES FOR THE 2nd HALF OF JUNE 1888—continued.

DISTRICTS.	QUANTITIES PER RUPEE IN SEER OF 80 TOLAS.															AVERAGE WAGES PER MONTH.		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Able-bodied Agricultural Labourer.	Scribe or Horse-keeper.	Common Mason, Carpenter or Blacksmith.
		Wheat.	Barley.	Rice, Best Sort.	Rice, Common.	Jowar or Sorghum (Sorghum vulgare).	Bajra or Pearl Millet (Pennisetum typhoides).	Majua or Rice (Eleusine indica).	Kangri or Millet (Setaria italica).	Gram, Channa, Cholay, Kadalay or Sunaga (Cicer arietinum).	Maize (Zea Mays).	Ashar or Thor (Cajanus indicus).	Firewood.	Salt.				
		Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Present fortnight.	Past fortnight.	Past fortnight.	R. a. p.	R. a. p.	R. a. p.
PUNJAB.																		
Hissar		18 0 18	16 0 16	10 0 10	10 0 10	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Rohat		16 0 17	15 0 16	11 0 11	11 0 11	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Gurgaon		18 0 18	16 0 16	11 0 11	11 0 11	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Duham		18 0 18	16 0 16	11 0 11	11 0 11	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Karnal		18 0 18	16 0 16	11 0 11	11 0 11	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Unbala		18 0 18	16 0 16	11 0 11	11 0 11	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Simla		13 0 13	12 0 12	12 0 12	12 0 12	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Kangra		13 0 13	12 0 12	12 0 12	12 0 12	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Hoshiarpur		10 0 10	9 0 9	9 0 9	9 0 9	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Jullundur		10 0 10	9 0 9	9 0 9	9 0 9	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Ludhiana		10 0 10	9 0 9	9 0 9	9 0 9	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Ferozepur		20 0 20	19 0 19	19 0 19	19 0 19	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Mooltan		20 0 20	19 0 19	19 0 19	19 0 19	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Thang		16 0 16	15 0 15	15 0 15	15 0 15	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Montgomery		18 0 18	17 0 17	17 0 17	17 0 17	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Lahore		18 0 18	17 0 17	17 0 17	17 0 17	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Anarisar		17 0 17	16 0 16	16 0 16	16 0 16	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Gurdaspur		18 0 18	17 0 17	17 0 17	17 0 17	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Sialkot		18 0 18	17 0 17	17 0 17	17 0 17	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Guilrat		18 0 18	17 0 17	17 0 17	17 0 17	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Guilranwala		17 0 17	16 0 16	16 0 16	16 0 16	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Shahpur		17 0 17	16 0 16	16 0 16	16 0 16	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Belum		17 0 17	16 0 16	16 0 16	16 0 16	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Kawalpindi		16 0 16	15 0 15	15 0 15	15 0 15	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Harara		16 0 16	15 0 15	15 0 15	15 0 15	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Peshawar		15 0 15	14 0 14	14 0 14	14 0 14	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Kohat		14 0 14	13 0 13	13 0 13	13 0 13	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Bannu		14 0 14	13 0 13	13 0 13	13 0 13	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
D. I. Khan		14 0 14	13 0 13	13 0 13	13 0 13	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
D. G. Khan		13 0 13	12 0 12	12 0 12	12 0 12	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Muzaffargarh		17 0 17	16 0 16	16 0 16	16 0 16	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
CENTRAL PROVINCES.																		
Saugor		17 0 17	16 0 16	16 0 16	16 0 16	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Damon		21 0 21	20 0 20	20 0 20	20 0 20	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Jubbulpore		17 0 17	16 0 16	16 0 16	16 0 16	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Mandla		24 0 24	23 0 23	23 0 23	23 0 23	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Seoni		20 0 20	19 0 19	19 0 19	19 0 19	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Narsinghpur		16 0 16	15 0 15	15 0 15	15 0 15	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Hoshangabad		15 0 15	14 0 14	14 0 14	14 0 14	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Nimar		14 0 14	13 0 13	13 0 13	13 0 13	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Asargarh Cantonment		14 0 14	13 0 13	13 0 13	13 0 13	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Betul		17 0 17	16 0 16	16 0 16	16 0 16	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Chhindwara		18 0 18	17 0 17	17 0 17	17 0 17	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Wardha		18 0 18	17 0 17	17 0 17	17 0 17	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0
Nagpur		17 0 17	16 0 16	16 0 16	16 0 16	23 0 23	19 0 19	21 0 21	...	26 0 26	20 0 20	17 0 17	110 0 120	11 0 11	10 8	5 0 0	0 0 0	10 0 0

[illegible]

None in market.

RETAIL PRICES FOR THE 2nd HALF OF JUNE 1888—continued.

DISTRICTS.	QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.															AVERAGE WAGES PER MONTH.														
	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLU (<i>Sorghum vulgare</i>).		BAJRA OR CUMBU (<i>Pennisetum typhoides</i>).		MARUA OR RAGI (<i>Zizania cana</i>).		KANOLI OR KANUN (<i>Eragrostis indica</i>).		GRAM, CHOLLA, KADALAY OR SUNAGA (<i>Cicer arietinum</i>).		MAIZE (<i>Zea Mays</i>).		ARAR OR THEE CADIAN PEA (<i>Cajanus indicus</i>).		FIREWOOD.		SALT.		Able-bodied Agricultural Labourer.	Syc or Horse-keeper.	Common Mason, Carpenter or Blacksmith.	
	Present fortnightly.	Past fortnightly.	Present fortnightly.	Past fortnightly.	Present fortnightly.	Past fortnightly.	Present fortnightly.	Past fortnightly.	Present fortnightly.	Past fortnightly.	Present fortnightly.	Past fortnightly.	Present fortnightly.	Past fortnightly.	Present fortnightly.	Past fortnightly.	Present fortnightly.	Past fortnightly.	Present fortnightly.	Past fortnightly.	Present fortnightly.	Past fortnightly.	Present fortnightly.	Past fortnightly.	R. a. p.	R. a. p.				R. a. p.
RAJPUTANA.																														
Jeypore	15 8 15 8	21 8 22 8	5 0 5 0	8 12 9 0	17 8 19 0	13 8 14 0	...	13 8 13 8	17 0 18 0	20 0 21 0	24 8 25 8	120 0 125 0	12 0 13 0	2 0 3 0	3 8 6 0	2 0 3 0	3 8 6 0	7 8 11 4												
Kishengurh	13 8 14 0	19 4 18 12	9 0 9 0	10 0 10 0	15 12 15 4	19 4 14 4	...	12 8 13 8	19 12 20 4	14 4 14 8	28 12 37 8	200 0 200 0	13 0 13 0	5 0 5 0	5 0 5 0	5 0 5 0	5 0 5 0	15 0 15 12												
Kerowlee	16 4 17 8	22 8 23 2	11 4 11 4	11 4 11 4	14 20 15 0	15 0 15 0	...	14 8 15 8	22 8 23 12	17 8 17 8	29 9 31 0	200 0 200 0	12 4 12 4	4 0 4 0	4 0 4 0	4 0 4 0	4 0 4 0	4 0 4 0												
Uluwar	16 4 17 8	22 8 23 2	11 4 11 4	11 4 11 4	14 20 15 0	15 0 15 0	...	14 8 15 8	22 8 23 12	17 8 17 8	29 9 31 0	200 0 200 0	12 4 12 4	4 0 4 0	4 0 4 0	4 0 4 0	4 0 4 0	4 0 4 0												
Bharatpur (City)	13 0 12 8	18 8 18 8	3 0 3 0	8 0 8 0	14 23 14 19 8	15 0 15 0	...	11 0 11 0	20 0 20 0	14 0 14 0	12 0 12 0	90 0 90 0	12 0 12 0	3 0 3 0	3 0 3 0	3 0 3 0	3 0 3 0	3 0 3 0												
Amre	13 0 12 8	18 8 18 8	3 0 3 0	8 0 8 0	14 23 14 19 8	15 0 15 0	...	11 0 11 0	20 0 20 0	14 0 14 0	12 0 12 0	90 0 90 0	12 0 12 0	3 0 3 0	3 0 3 0	3 0 3 0	3 0 3 0	3 0 3 0												
Deoli Cantonment	16 12 16 5	22 5 22 9	4 8 4 8	9 0 9 0	17 8 17 8	15 12 15 12	...	25 0 25 0	16 0 16 0	15 8 15 8	12 0 12 0	160 0 160 0	11 4 11 4	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0												
Erinpura	13 4 13 8	20 0 20 2	6 8 6 8	9 0 9 0	17 8 17 8	15 12 15 12	...	25 0 25 0	16 0 16 0	15 8 15 8	12 0 12 0	160 0 160 0	11 4 11 4	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0												
Sirohes	12 8 12 8	21 0 21 0	6 8 6 8	9 0 9 0	17 8 17 8	15 12 15 12	...	25 0 25 0	16 0 16 0	15 8 15 8	12 0 12 0	160 0 160 0	11 4 11 4	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0												
Abu	11 6 11 6	16 0 16 0	6 8 6 8	9 0 9 0	17 8 17 8	15 12 15 12	...	25 0 25 0	16 0 16 0	15 8 15 8	12 0 12 0	160 0 160 0	11 4 11 4	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0												
Bahnere	12 4 12 6	18 0 18 0	6 12 6 12	8 12 8 12	18 0 18 0	15 0 15 0	...	25 0 25 0	16 0 16 0	15 8 15 8	12 0 12 0	160 0 160 0	11 4 11 4	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0												
Bikaner	10 8 10 8	...	5 0 5 0	7 2 7 2	12 12 12 12	11 10 11 10	...	25 0 25 0	16 0 16 0	15 8 15 8	12 0 12 0	160 0 160 0	11 4 11 4	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0												
Jeysulmere	14 0 14 0	22 0 22 0	9 0 9 0	10 0 10 0	12 12 12 12	11 10 11 10	...	25 0 25 0	16 0 16 0	15 8 15 8	12 0 12 0	160 0 160 0	11 4 11 4	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0												
Hilly Tracts of Meywar	14 0 14 0	22 0 22 0	9 0 9 0	10 0 10 0	12 12 12 12	11 10 11 10	...	25 0 25 0	16 0 16 0	15 8 15 8	12 0 12 0	160 0 160 0	11 4 11 4	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0												
Meywar (Oodeypore)	12 14 12 14	17 9 17 9	9 0 9 0	10 0 10 0	12 12 12 12	11 10 11 10	...	25 0 25 0	16 0 16 0	15 8 15 8	12 0 12 0	160 0 160 0	11 4 11 4	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0												
Banswara (Meywar Agency)	15 4 15 4	18 12 18 12	8 12 8 12	10 0 10 0	13 12 13 12	12 8 12 8	...	25 0 25 0	16 0 16 0	15 8 15 8	12 0 12 0	160 0 160 0	11 4 11 4	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0												
Partabgarh (Meywar Agency)	15 4 15 4	18 12 18 12	8 12 8 12	10 0 10 0	13 12 13 12	12 8 12 8	...	25 0 25 0	16 0 16 0	15 8 15 8	12 0 12 0	160 0 160 0	11 4 11 4	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0												
Marwar (Jodhpore)	12 5 12 5	16 9 16 9	6 12 6 12	7 12 7 12	15 0 15 0	14 11 15 0	...	25 0 25 0	16 0 16 0	15 8 15 8	12 0 12 0	160 0 160 0	11 4 11 4	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0												
Bickener	10 10 10 10	...	2 14 2 14	6 12 6 12	15 0 15 0	14 11 15 0	...	25 0 25 0	16 0 16 0	15 8 15 8	12 0 12 0	160 0 160 0	11 4 11 4	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0												
Boondee	16 0 16 0	22 0 22 0	10 8 10 8	11 0 11 0	17 8 17 8	15 12 15 12	...	25 0 25 0	16 0 16 0	15 8 15 8	12 0 12 0	160 0 160 0	11 4 11 4	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0												
Bonollee	14 0 14 0	22 0 22 0	9 0 9 0	10 0 10 0	12 12 12 12	11 10 11 10	...	25 0 25 0	16 0 16 0	15 8 15 8	12 0 12 0	160 0 160 0	11 4 11 4	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0												
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CENTRAL INDIA.																														
Indore	No return received.																													
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Gurgaon	No return received.																													
Bagalkhand (Sutna)	12 14 12 14	18 9 18 8	8 0 8 0	10 0 10 0	15 3 15 4	14 0 14 0	...	25 0 25 0	16 0 16 0	15 8 15 8	12 0 12 0	160 0 160 0	11 4 11 4	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0	6 0 6 0												
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† Six pies per bundle.

† Nine pies per bundle.

* Six pies per bundle.

† Nine pies per bundle.

GOVERNMENT OF INDIA.
DEPARTMENT OF FINANCE AND COMMERCE.

RETAIL PRICES FOR THE 2nd HALF OF APRIL 1888.

(See Supplement to the Gazette of India, dated 26th May 1888.)

(See Supplement to the Gazette of India, dated 26th May 1908)																													
QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.																													
DISTRICT.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLAM (<i>Sorghum vulgare</i>).		BAJRA OR CUMBU (<i>Pennisetum typhoides</i>).		MARUA OR RAGI (<i>Eleusine indica</i>).		KANGNI OR ITALIAN MILLET (<i>Setaria italica</i>).		GRAM, CHENNA, CHOLA, KADALAY OR SUNAGA (<i>Cicer arctium</i>).		MAIZE (<i>Zea Mays</i>).		ARHAR OR TURK CADIAN PEA (<i>Caajanus indicus</i>).		FIREWOOD.		SALT.				
	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	
N.-W. PROVINCES.	S. Ch. 16 13	S. Ch. 14 12	S. Ch. 25 2	S. Ch. 24 0	S. Ch. 8 4	S. Ch. 11 0	S. Ch. 13 8	S. Ch. 12 0	S. Ch. 17 0	S. Ch. 16 8	S. Ch. 15 0	S. Ch. 15 0	S. Ch. 15 0	S. Ch. 15 0	S. Ch. 15 0	S. Ch. 21 13	S. Ch. 21 8	S. Ch. 21 13	S. Ch. 21 8	S. Ch. 21 13	S. Ch. 21 8	S. Ch. 21 13	S. Ch. 21 8	S. Ch. 21 13	S. Ch. 21 8	S. Ch. 21 13	S. Ch. 21 8	S. Ch. 21 13	S. Ch. 21 8
Jhansi																													

E. J. SINKINSON,
Offg. Secretary to the Government of India.

DEPARTMENT OF FINANCE AND COMMERCE,
(Statistical Branch).

GOVERNMENT OF INDIA.
DEPARTMENT OF FINANCE AND COMMERCE.

Comparative Statement of the Net Indian Sea and Land Customs Revenue (excluding Salt Revenue) for the first three months of the official year 1888-89, and of the seventeen preceding years.
(IN THOUSANDS OF RUPEES.)

YEAR.	FOR THE THREE MONTHS, APRIL TO JUNE.										TOTAL BRITISH INDIA.										YEAR.		
	BENGAL.			BOMBAY.			SINDH.			MADRAS.			BURMA.			TOTAL BRITISH INDIA.							
	On Imports of Liquors.	On other Imports.	Total Revenue.	On Imports of Liquors.	On other Imports.	Total Revenue.	On Imports of Liquors.	On other Imports.	Total Revenue.	On Imports of Liquors.	On other Imports.	Total Revenue.	On Imports of Liquors.	On other Imports.	Total Revenue.	On Imports of Liquors.	On other Imports.	Total Revenue.	On Imports of Liquors.	On other Imports.		Total Revenue.	
1871-72	2,46	16,87	24,68	2,57	7,46	10,94	27	24	32	83	94	2,99	3,89	7,81	35	1,11	6,69	8,15	6,39	28,67	35,06	17,36	52,42
1872-73	3,19	15,58	24,45	1,82	10,34	12,95	26	22	79	1,27	1,03	3,37	3,16	7,56	91	1,27	11,85	14,03	6,91	30,78	37,69	22,57	60,26
1873-74	2,24	15,12	21,21	1,69	8,96	11,46	30	15	29	74	1,05	3,42	3,86	8,33	90	1,19	11,04	13,13	6,18	28,53	34,71	20,16	54,87
1874-75	3,06	16,42	22,86	1,70	8,74	11,45	30	11	26	67	91	3,70	3,21	7,82	1,11	1,79	8,09	10,90	7,08	30,76	37,84	15,95	53,79
1875-76	3,08	19,81	27,25	1,88	10,38	15,14	28	28	66	1,22	1,13	3,66	3,92	8,65	1,10	1,08	14,60	16,78	7,47	35,15	42,62	26,42	69,04
1876-77	3,38	15,70	21,74	2,18	9,12	11,64	34	14	7	55	1,47	3,30	2,26	7,03	1,30	1,40	9,92	12,62	8,57	29,66	38,23	15,35	53,58
1877-78	3,80	19,07	25,93	2,61	10,90	13,98	55	22	13	90	1,35	1,85	48	3,68	1,38	1,56	8,49	11,43	9,69	33,60	43,29	12,63	55,92
1878-79	3,39	16,13	22,76	2,17	10,62	13,47	48	11	9	68	1,51	2,60	1,14	5,35	2,12	1,84	9,06	13,92	9,77	31,30	41,07	15,01	56,08
1879-80	2,59	15,23	20,05	2,40	8,32	11,35	71	21	7	99	1,30	1,91	1,30	4,51	1,84	1,46	12,40	15,70	9,14	27,13	36,27	16,33	52,60
1880-81	3,33	12,09	18,17	2,29	10,75	13,57	1,21	25	8	1,54	1,41	2,49	2,44	6,34	1,32	1,87	12,64	15,83	9,56	28,35	37,91	17,54	55,45
1881-82	3,59	13,46	20,20	2,85	10,85	14,28	1,14	36	31	1,61	1,24	2,51	2,14	5,89	1,90	1,91	13,82	17,63	10,72	29,09	39,81	19,86	59,61
1882-83	3,85	1	7,28	3,02	—68*	2,84	92	2	18	1,12	1,42	...	1,11	2,53	2,32	1	18,99	21,32	11,53	—64*	10,89	24,20	35,09
1883-84	3,63	2	8,46	2,82	13	3,31	97	1	16	1,14	1,27	1	1,55	2,83	2,25	5	15,64	17,91	10,94	24	11,18	22,50	33,68
1884-85	3,08	10	5,69	2,75	13	3,42	17	2	15	1,34	1,22	3	1,93	3,18	2,14	3	10,89	13,06	10,36	31	16,67	16,02	26,69
1885-86	3,47	3	6,58	3,00	14	3,41	1,08	1	24	1,33	1,24	2	64	1,90	1,63	...	14,15	15,78	10,42	20	16,62	18,38	29,00
1886-87	3,32	5	6,06	3,08	16	3,65	1,16	3	27	1,46	1,49	1	1,31	2,81	2,41	—2*	14,07	16,46	11,46	23	11,69	18,75	30,44
1887-88	2,82	10	5,88	3,53	14	4,19	1,87	3	21	1,61	2,24	...	1,95	3,49	2,71	1	13,85	16,57	12,67	28	12,95	18,79	31,74
1888-89	3,63	1,08	9,37	3,70	1,17	5,84	1,19	21	17	1,57	2,49	19	1,24	3,92	2,47	30	8,88	11,65	13,48	2,95	16,43	15,42	31,85

* The amount refunded is greater than the duty collected.

DEPARTMENT OF FINANCE AND COMMERCE,
STATISTICAL BRANCH :
Calcutta, 23rd July, 1888.
E. J. SINKINSON,
Offr. Secretary to the Government of India.

GOVERNMENT OF INDIA.
HOME DEPARTMENT.

PRACTICAL APPLICATION OF SANITARY PRINCIPLES TO TOWNS AND VILLAGES
IN INDIA.

No. $\frac{3}{212-225}$.

Extract from the Proceedings of the Government of India in the Home Department (Sanitary),—under date Simla, the 27th July, 1888.

Read the undermentioned papers :

- Report of the Royal Commission on the Sanitary State of the Army in India, 1863.
- Despatch from Her Majesty's Secretary of State for India, No. 83 (Statistics and Commerce), dated 2nd May, 1878, forwarding, with remarks, a Memorandum by the Army Sanitary Commission on the Bengal Sanitary Report for the year 1876.
- Home Department Circular letter to Local Governments and Administrations, Nos. 8—227-236, dated 7th August, 1878, circulating the above Despatch and enclosed Memorandum.
- Despatch from Her Majesty's Secretary of State for India, No. 58 (Statistics and Commerce), dated 24th April, 1879, forwarding remarks by the Army Sanitary Commission, dated 19th March, 1879, on the practical application of sanitary principles to towns and villages in India.
- Resolution by the Government of India in the Home, Revenue and Agricultural Departments, Nos. 9—259-70, dated 7th July, 1879, circulating, with remarks, the above Memorandum from the Army Sanitary Commission.
- Despatch from Her Majesty's Secretary of State for India, No. 102, dated 15th October, 1885, forwarding, with remarks, a Memorandum by the Army Sanitary Commission on the Bombay Sanitary Report for 1883.

Read also the following correspondence :

- Report on the District Boards in the Madras Presidency for the year 1885-86, with the orders of the Madras Government thereon.
- Letter to the Government of Madras, No. 132, dated 24th September 1887.
- Reports for 1886 from the Sanitary Commissioners in Madras, Bombay, Bengal, the North-Western Provinces and Oudh, the Central Provinces, Burma, and Assam, with the orders of the Local Governments thereon.
- Orders of the Government of India on the Reports of the Sanitary Commissioners enumerated above.
- Reports for 1885-86 on the Administration of Municipalities in Bombay, Bengal, Burma, Assam, and the Hyderabad Assigned Districts, with the reviews of each Local Government and Administration concerned.
- Orders of the Government of India on the Municipal Reports enumerated above.

RESOLUTION.

The practical application of sanitary principles to towns and villages in India has since the publication in 1863 of the Report of the Royal Commission on the Sanitary State of the Army in India received the continuous attention of the Government. The Report of the Royal Commission, the reports submitted subsequently from time to time by the various Provincial Sanitary Commissioners, and the suggestive reviews of those reports which have emanated from the Army Sanitary Commission in England, have brought to notice the chief sanitary defects of urban and rural areas, and have indicated the methods by which they might be remedied. It is through no want of sympathy with the cause of sanitary improvement that the Government of India has not been able hitherto to give as full effect to these recommendations as it could have wished. The difficulties to be overcome were numerous and formidable, and lay, to begin with, as much in the ignorance of the people and in the passive resistance offered by them to all departures from the practice of ages, as in the want of funds and the absence of an executive agency to give effect to the orders of the central authority. However convinced the Government of India might be of the value of

the suggestions made for its adoption, and however anxious to carry them into effect, it had to proceed with circumspection, and with a due regard to the means at its disposal as well as to the prejudices of the heterogeneous populations entrusted to its care. Under such circumstances progress has unavoidably been slow. Still considerable progress has been made. The ignorance of the people on all sanitary questions has been in some measure mitigated by the Department of Public Education, which has imported into the ordinary school curriculum instruction in the elementary principles of sanitary science. Popular prejudices have been combated by the judicious influence of the officers of Government, and by the introduction of improved sanitary methods, wherever this was practicable. Sanitary Commissioners have been appointed in all Provinces; information regarding the sanitary needs of towns, and later of rural areas, has been collected; and in many municipalities and some rural areas this information has been turned to account in the provision of a pure water-supply, of improved drainage, and of better conservancy arrangements. The Government of India readily admits that what has been done in these directions may appear small in comparison with what remains to be done. But it does not admit that, having regard to the difficulties which lay in the way, reasonable progress has not been made.

2. It has been stated that the main obstacles which have hitherto impeded sanitary improvement in India lay in the ignorance of the masses and their dislike to any change of custom, in the want of efficient executive agencies, and last, though not least, in the want of funds. Upon the first of these obstacles, the Governor-General in Council does not on the present occasion desire to dwell. It indeed still constitutes a formidable difficulty, upon which, in rural areas at all events, little sensible impression has yet been made, and its existence renders it necessary still to observe great caution in the introduction of sanitary reforms. But with the rapidly advancing tide of popular education, the perception of the beneficent intentions of the Government comes home more clearly to the people than it did; and there is less danger than there was that measures taken for the improvement of the health of the people and the prevention of disease should be misconstrued as arbitrary interference with time-honoured practices. If some years ago it was generally and correctly felt by Local Governments and Administrations that authoritatively to press the subject of sanitary improvement, especially in villages, would be of little avail, and that persuasion, not coercion, was the right plan to follow, it is no less generally felt today that a more forward, though still cautious and tentative, policy would now be opportune.

3. In considering therefore the measures most calculated to promote the cause of sanitary reform in India, attention should, in the first place, be directed to the question of executive agencies, and to the question of funds. Taking the question of executive agency first, it has to be regarded in its relation to urban and to rural areas. In relation to urban areas, the Governor-General in Council is glad to think that the question now presents far less difficulty than it did. When sanitary reform in India received its first impetus from the investigations of the Royal Commission referred to in the preamble, there was, outside the Presidency towns, practically no organization for the prosecution of sanitary work. The hardworked district officer did what he could to keep his towns clean; but sanitary science in India was then in its infancy, while the most enlightened inhabitants of Mofussil towns knew nothing about it, and never troubled themselves to learn anything. The result was manifest in the lamentable state of things depicted in the Report of the Royal Commission. Since then, however, there has been much improvement. The growth of the spirit of self-help and the perception of the advantages of sanitation in municipalities has in recent years been encouraging; and there is reason to think that the Government may with increasing confidence rely on the co-operation of municipal bodies in promoting sanitary reform. The Municipal Acts, which formerly were adapted to an early stage of civic development, have now been cast in an ampler mould. Those now in force in the various Provinces confer a larger discretion and authority to pass rules and bye-laws for sanitary purposes, and impose upon Municipal Committees the duty, as far as the funds at their disposal will permit, of providing, among other things, for the sanitation of the towns. Municipal Boards can, therefore, both entertain the requisite agency for carrying out the law, and raise the necessary funds. The areas to be dealt with are limited, and

within them the interests of the people affected are mostly identical. There is a field for concentrated effort ; and the Government may, therefore, with greater confidence look to Municipal Committees for active assistance in carrying into effect the measures of sanitary improvement declared to be necessary for the towns over which they preside.

4. In rural areas the case is different. Among the village population the sense of the need for sanitary reform is but little, if at all, more developed than it was when the Royal Commission reported a quarter of a century ago. The great feature of Indian rural life is immobility of custom, upon which novel ideas make but little impression. For improving the sanitation of villages executive rules have been from time to time framed and recommended for general adoption. It does not appear however that they were anywhere productive of much good, for there was no executive agency to supervise their working or, when necessary, enforce them.

But in this important matter of executive agency a great improvement has been effected by the District and Local Boards Acts passed by the Legislative Council of the Governor-General and by the various local legislatures. In the Madras Presidency a gradation of rural Boards has been established, one of which deals with the village ; another with the subdivision of a district ; a third with the entire district. All these Boards have their special functions to discharge ; but each has to provide within the area of its jurisdiction for the sanitation of towns and villages, and to that end is endowed with powers to entertain the necessary establishments. In Bengal and the Punjab the organization established, or to be established, is on the whole similar to that established in Madras ; and though under the system introduced in Bombay, the North-Western Provinces, and Central Provinces, a larger territorial unit of self-government has been adopted, there is no reason why the executive agencies should not act effectively throughout the larger areas. The various Acts of the Legislature, which create this system of local self-government, require the Boards to undertake, among other things, local works and measures likely to promote the health of the public within the area subject to their authority, and empower them to entertain establishments for that purpose. In some instances also the laws creating these bodies confer upon them limited powers of taxation. But when this is not the case, or when it may be inexpedient to resort to taxation, or when funds may be insufficient to meet the expenditure necessary for sanitary and other improvements, it is always open to the Boards, with the sanction of the Local Government, to have recourse to loans under Act XI of 1879 (The Local Authorities Loan Act).

This legislation has therefore provided the Government of India, for the first time, with the means of creating that agency for executing sanitary reform in rural areas without which its previous exertions proved comparatively fruitless. The agency, even in the Provinces in which it has been established, is as yet in its infancy ; but year by year it will grow stronger and more efficient, and the Governor-General in Council therefore desires to impress upon Local Governments that, from the beginning, the promotion of sanitation should be regarded as one of the most important duties of all District and Local Boards, and of Village Unions, where they exist.

5. In initiating and carrying approved sanitary measures into effect, it will be always essential to enlist the assistance and co-operation of the district authorities, which indeed are always available to Municipalities and Local Boards. But it must be remembered that district officers, who have generally shown themselves forward in promoting sanitary improvements and in co-operating with Local Boards in these matters, have neither the time nor the technical knowledge, nor the opportunities requisite for a comprehensive survey of the entire field of activity which is necessary for the discharge of the duties in question. Experience in India as well as in other countries has shown that, unless local executive agencies are carefully guided and controlled in sanitary matters, there is almost certain to be misdirection of energy and wasteful expenditure. As has been pertinently observed, "it is vain to hope that the numerous public bodies to which the sanitary administration of India has been committed will be found competent to discharge their important duties, so long as there is no competent authority possessing the necessary knowledge and armed with the necessary

powers to assist their deliberations, guide their actions, and, when the occasion arises, correct their mistakes and remedy their inactivity." It therefore appears to the Government of India to be eminently desirable that there should be established in each Province a Sanitary Board through which the Local Government can operate, and to which, subject in all respects to the orders of the Local Government, shall be entrusted the control and supervision over sanitary works, whether undertaken in urban or rural areas. It was one of the recommendations of Lord Stanley's Commission, referred to in the preamble to this Resolution, that a Commission of Health should be appointed at the seat of each Local Government, with purely consultative functions, to advise on all questions relating to sanitation. Something more than a consultative body is, in the opinion of His Excellency in Council, now required; and the Sanitary Boards which he wishes to create should therefore from the outset receive recognition, not only as a consultative body, but also as the executive agency through which the Government acts in the Sanitary Department.

These Sanitary Boards might be composed of an officer of approved administrative experience, the Sanitary Commissioner for the Province, and an officer of the Public Works Department skilled in sanitary engineering. With these three officers might be associated one or more non-official members appointed by the Local Government. Every Commissioner of Division in Northern India and Bombay, and possibly District Collectors in Madras, might also be *ex-officio* members of the Board when dealing with questions connected with their divisions or districts. It is probable that the duties of the Board would not, at all events for some time to come, be onerous, and could well be combined with the other and ordinary duties of the members.

Finally, it is desirable that the Provincial Sanitary Boards should, subject to the orders of the various Local Governments, be in constant communication with the Sanitary Commissioner with the Government of India, whose advice upon large schemes of sanitary reform will always be useful, and who will be in a position to communicate to one Provincial Board the results of experience gained by another. The Sanitary Commissioner with the Government of India, who acts under the general instructions of the Home Department, will thus, so far as may be needed, exercise the functions of a general co-ordinating and consultative authority; and through him the Government of India will be in a position to enforce, if necessary, that general control which it is competent to exercise over all branches of the administration. It may afterwards be necessary to associate with the Sanitary Commissioner an expert in sanitary engineering science: but this is a question which need not be raised in this place.

6. In orders issued by the Home Department on Municipal and Local Board reports for 1885-86, cited in the preamble to this Resolution, the Governor-General in Council took the opportunity of laying down the general lines on which, in his opinion, future action of local bodies should be directed in promoting sanitary reform. The principle which he had in view was, that action should be preceded by an accurate ascertainment of the requirements of each locality. Accordingly it was suggested to various Local Governments that a sanitary survey of each municipality and rural area should be undertaken with as little delay as possible, and that plans and estimates should be prepared of all the improvements necessary to provide each town or village with an efficient system of water-supply, drainage, and conservancy. The most important of these requirements, and that which, in the opinion of the Government of India, may at first be dealt with most effectively, and with the greatest chance of the active assistance and sympathy of the people, is the provision of pure water. Drainage,—especially in those localities in which the construction of public works, such as railways and canal embankments, have interfered with the natural flow of water, and may have injuriously affected the people's health,—is also a matter calling for early attention. But, while thus indicating the directions in which sanitation can be best promoted, there is on the part of the Governor-General in Council no desire to limit the discretion of Local and Provincial authorities as to their choice of action. That can best be determined by a knowledge of local requirements. In the orders in question it was added that plans, when once fixed, should be executed from year to year as

funds become available, the object aimed at being persistently kept in view until it was completed. The Government of India desires in this place to call special attention to these instructions, which were devised with the view of checking wasteful recurring expenditure; and to express the hope that the annual reports on the Administration of Municipalities and Local Boards in each Province will henceforward shew that progress is being made in the desired direction.

Another important matter to which attention must here be called is the provision in every Province of simple rules for the regulation of village sanitation. In some Provinces such rules have been for some time in operation, though with no very beneficial result, while in others it is now in contemplation to render such rules more effectual by legislation. Wherever the existing law makes no provision, or insufficient provision, for the enforcement of necessary sanitary measures in rural areas, there should be no hesitation in taking the necessary power by legislation. And in this connection His Excellency in Council thinks, it may be of advantage if the attention of all interested in sanitation is again called to the valuable remarks made in 1879 by the Army Sanitary Commission on the practical application of sanitary principles to towns and villages in India. Their remarks are, therefore, published as an appendix to this Resolution.

7. Passing from the organization of the Sanitary Department to the important question of the provision of funds, it is, in the first place, to be observed that the various Municipal Acts enable the corporate bodies created by these Acts to raise by local taxation the funds necessary for local expenditure. Similar power is conferred on Local Boards by the Madras, Bengal, and Punjab Local Boards Acts, but apparently not elsewhere. It will be for the consideration of the Governments of Bombay and the North-Western Provinces and Oudh, which possess Legislative Councils, whether legislation should be undertaken with a view to confer powers of taxation upon Local Boards in those Provinces. Meanwhile it is incumbent on the Governments of the Provinces in question to place Local Boards in possession of funds sufficient to meet the reasonable requirements of local sanitation. But though sufficient money to meet current expenditure may be provided in these ways, it will probably be necessary to raise additional funds for the execution of new or large works. It is indeed probable that local income may be increased without any hardship to the tax-payers. In certain Provinces some productive methods of municipal taxation have not yet been turned to account: but even when all current revenue is taken into account, it may, and doubtless often will, be found necessary to have recourse to loans under Act XI, of 1879, or to appeals to the Provincial or Imperial Governments for grants-in-aid of local resources.

With reference to loans, the Governor-General in Council desires to say that, so long as borrowed money is not spent on the ordinary current operations of a Municipal or Local Board,—so long as it is spent on works of lasting utility, there can, as a matter of principle, be no objection to imposing on the rate-payers of future years an obligation to subscribe. The Local Authorities Loan Act, XI of 1879, affords certain facilities for borrowing by public bodies; but the rates of interest at which these bodies can raise the loans in the open market are often so high as to be practically prohibitive. The Governor General in Council has therefore taken the subject of loans to Local bodies into his careful consideration, being satisfied that no policy of sanitary reform in India can be successful unless facilities are provided for local bodies to raise funds for sanitary improvements on less onerous terms than they at present can do. The Government of India has not yet come to a final conclusion on this important subject; but it is not indisposed to think that, when expensive works of the kind in question have received the previous approval of Government, and when sufficient control over the local finances has been reserved to ensure the fulfilment of the conditions on which the raising of the loan is sanctioned, it might be expedient to authorize Local Governments, subject to certain prescribed limitations and conditions, to raise and establish a Provincial loan fund, and make its own bargains with local bodies in regard to advances necessary for sanitary improvements and other works of lasting utility. The question is one of general policy, which demands careful consideration; but the decision upon it will not now be long delayed.

8. With reference to the subject of contributions from Provincial funds for sanitary works of utility, His Excellency in Council has observed with satisfaction that a willingness has already been exhibited to contribute from Provincial resources in aid of sanitary improvements, both in urban and rural areas. Where the ability of local bodies to raise loans is undeveloped and their credit not established, the Government of India approves of such contributions, and would like to see regular provision made for them in Provincial budgets, when this can be done with a just regard to other demands on Local Governments. In some cases—such, for instance, as obstructed drainage, incidentally referred to in paragraph 6 above, as resulting from great public works—contributions would be obviously appropriate. But if contributions are to take a definite place in the plan of Provincial finance, His Excellency in Council would be glad to see them systematised on the grant-in-aid principle, which has been found so effective in promoting education, care being taken to so regulate the distribution of the grants as to minimise the evils, inherent in the grant-in-aid system, of weakening local responsibility and fostering extravagance in expenditure.

Under the system indicated above, it will, it is hoped, be possible to meet from Local resources the money necessary for Local sanitary improvements. There may, however, be very exceptional cases the requirements of which cannot be met from Local or Provincial resources or by loans. In such rare cases the Government of India will not refuse to consider applications from Local Governments in the interests of sanitary improvements of more than local importance.

ORDER.—Ordered, that a copy of the above Resolution be forwarded to Local Governments and Administrations for information and guidance; that a copy be forwarded to the Department of Finance and Commerce and to the Public Works Department, for information; and that a copy be forwarded to the Sanitary Commissioner with the Government of India, for information.

Also that the Resolution be published in the *Gazette of India*.

I.

Practical Hints for the Sanitary Improvement of the smaller Municipal Towns in India.

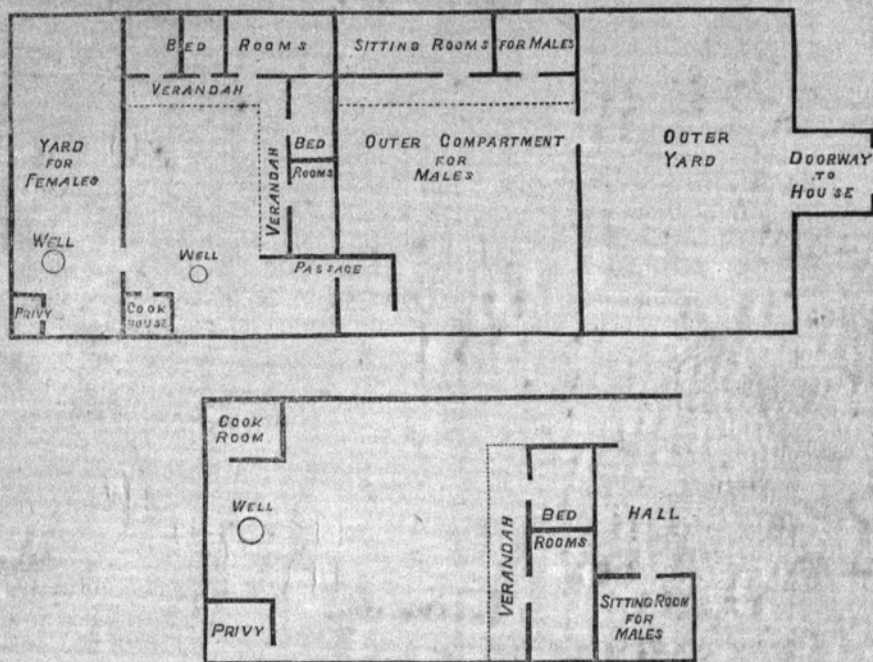
1. In the larger cities and towns in India, employing their own Engineers and Officers of Health, the foundation of sanitary improvement must be laid in works of domestic sewerage and drainage, in water-supply brought from a distance, in surface levelling, paving, and cleansing, and in surface drainage. These, together with opening up new thoroughfares, tree planting, and improved house construction, where sufficient funds are available, will improve the general health, and mitigate or prevent outbreaks of epidemic disease in all the larger groups of population. They are not only the most effectual measures which can be adopted for these objects, but for large dense populations they are in the end the cheapest.

In the smaller municipalities the chief difficulty that lies in the way of adopting them is, that where there are a few thousand people, most of whom are of the poorer classes, funds are limited, and there is no local source from which the capital sums required for the execution of permanent works can be drawn, at least at present. Although public health measures to be executed mainly by hand labour may be more costly than the current outlay for permanent works, still much may be done among small populations by the proper application of limited income; and the object of the present paper is to point out, as far as it may be practicable to do so, the chief directions in which limited local expenditure may be applied to effect this object. But the nature and extent of legislative and administrative measures and authorities required to give practical effect to the principles embodied in the following paragraphs, whether for small municipal towns or villages, must be left solely to the authorities in India.

2. In all municipalities the two primary means of preventing outbursts of disease are strict attention to domestic cleanliness, and the protection of water-sources.

There is every reason for suspecting that the chief disease causes in all Indian towns are to be found within the walls which enclose the compounds and houses.

Here are sketches of two classes of houses, taken from a Bengal report. The first of well-to-do people; the second is a middle class house.

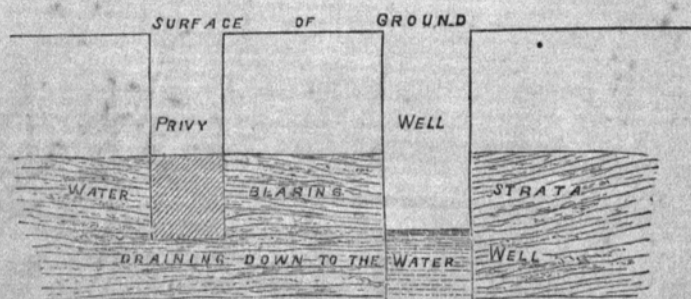


These houses, from being enclosed within walls, have no proper ventilation, and the rooms are so dark as sometimes to require a lamp day and night.

In some parts of India it is the practice to cover in the entire courtyard, so that foul exhalations are prevented from escaping into the air. In such cases ventilation of the court as well as of the houses is required. The huts of the poor have generally no enclosure walls, and have one door to the hut; they have hence more light and air.

3. The privies in all these houses are described as being "made of wells in which the dirt accumulates for years."

The plans show that the water wells are dug in the same soil close to the privies, and this rough sketch shows the dangers to health arising from such an arrangement:



There cannot be a doubt that the well water under such circumstances is liable to constant pollution by infiltration of liquid filth from the privy, and also by foul surface washings from the yard, which is often in an exceedingly filthy state from the urine and dung of animals as well as of human beings.

Where houses have been long inhabited, the whole ground within the court walls under the sleeping rooms, from which the well draws most of its water, is fouled, and the inhabitants are exposed to all the consequences of living on foul ground, breathing impure air, especially at night, and drinking unwholesome water.

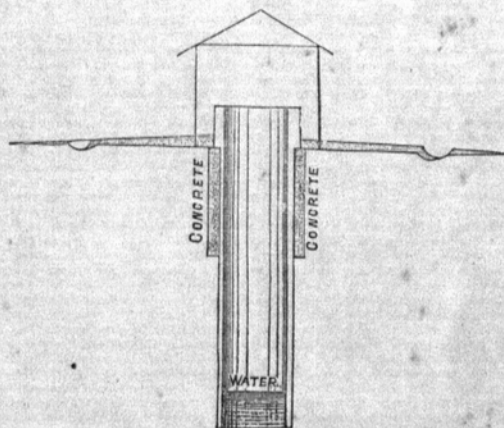
The simplest way of avoiding these dangers would be by rebuilding the houses on new ground, and adopting precautions to prevent the subsoil being polluted with filth. But as this cannot be done, the next best thing is to remedy the present evils as far as it may be practicable to do so.

4. The first step is obviously to prevent further pollution of the ground by cleansing and filling up all cesspits and filth wells. In many instances it would be advantageous to dig up and remove the surface earth of the compounds, and to replace it with fresh clean earth. Wherever means are available, the surface of the court or compound should be covered with paving, or some other hard impermeable material, such as rammed kunkur, and drained by channels to the streets outside.

Where a durable material for surface paving cannot be obtained, the most efficient substitute would probably be found in fresh clay hard rammed, so as to form a hard impervious surface, to be renewed by clean material at short intervals.

No cattle should ever be kept in small compounds. Besides the constant danger to health inseparable from this practice, it ensures rapid pollution of the subsoil, augments the difficulty of cleansing, and fouls the well water.

5. Where the cesspit has been close to the house well in the manner shewn in the plans, it would be better to fill the well up with clean earth, and dig another as far as possible from the site of the cesspit. All new wells should be cased outside with clay or cement, or with concrete, to a sufficient depth to cut off the surface and subsoil water from the well, in the manner shewn in the following section :



The well is dug and built up in the usual way, but when it comes within 8 or 10 feet of the surface, the tube must be coated outside with puddle or concrete, to cut off the upper portion of the water. The tube of the well should be carried two feet above the ground level, and covered with a roof; the ground round the well should also be coated with concrete and sloped away from the well to open channels, as shown in the plan. With these precautions, which are not difficult to take, and not costly, any well within a compound, except in very foul ground, would yield wholesome water.

6. The abolition of well or cesspit privies being absolutely necessary before the water for domestic use can be safe, the only principle that can be adopted in their stead is that of continuous daily cleansing, and removal of all house filth and refuse of food, &c. The floor of the privy should be paved or covered with concrete or asphalt, and a moveable vessel placed upon it to be

daily removed and emptied by sweepers, with or without the use of dry earth. There is absolutely no other safe plan except daily removal. If from any local cause daily removal cannot be carried out, then it may be suggested that the municipal authority should construct groups of privies with private keys for the use of families, and that all conveniences of the kind within private compounds should at the same time be abolished. The whole surface of the compound should be kept clean day by day.

7. As much of the fever from which the people suffer is due to sleeping on the ground, no greater improvement could be introduced by the municipality than inducing the people to use beds raised above the ground level.

Were these simple improvements carried out in the smaller municipal towns there would be considerable improvement in the public health, so far as the houses are concerned.

They may be summarized as follows :

(1) Abolishing all cesspits and privy wells, filling them up with clean earth, and substituting for them vessels to be emptied daily, or public privies to be provided as suggested above; all other privy arrangements to be improved in the same way, and everything removed daily.

(2) Removing all wells from the polluted ground near cesspits, and digging new wells as far as possible from them, on the principles already stated. Old wells to be filled up.

(3) Removing cattle from house compounds, improving the surface, and maintaining strict cleanliness.

(4) Raising all beds and sleeping places above the ground level.

(5) Where people resort to the fields for natural purposes, provision should be made for immediately covering the deposits with fresh earth, and certain limits should be distinctly marked by posts, within which no inhabitant should be permitted to obey the calls of nature.

8. Wherever the municipality has been able to provide pure water, brought from a distance, it would be better to close all house wells, or to discourage their use. In this way the house problem would be simplified.

9. The next most important class of sanitary improvements are those required for the surface of the town outside the houses, and have for their object surface cleanliness, surface drainage, filling up and levelling all hollows and water holes not needed for supplying water for domestic purposes, or for bathing or for watering animals, and removing animals and unwholesome trades beyond the outskirts of the population.

10. It will be seen that every one of these objects can be attained without outlay of capital. All that is required is labour and a suitable direction of it.

For instance, many municipal towns suffer in health from the presence in or near them of broken ground, holes with water in them, a larger number of tanks than is required for purposes of water-supply, using the same tank for drinking, bathing, washing, and watering animals.

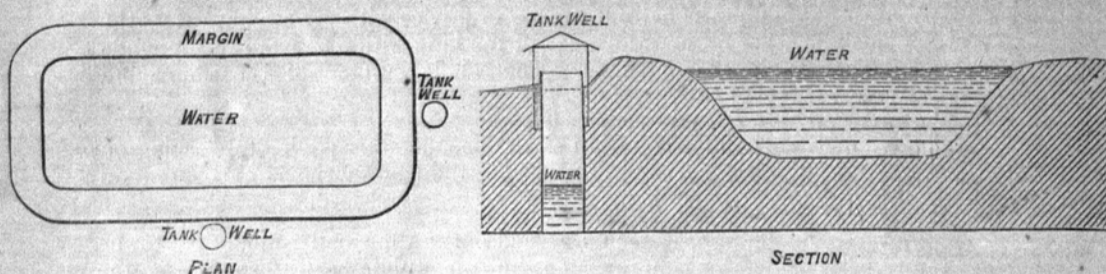
Where such disease causes are present, the following rules should be applied :

(1) All holes or inequalities should be filled up and levelled.

(2) No tank used for supplying domestic water should ever be used for bathing, or for watering animals. The number of tanks required for all the purposes of the town should be carefully decided, and then all others should be filled up, and the land, which is often of considerable value, should be turned to use.

(3) The margins of all tanks should be carefully formed and paved, or covered with grass. Suitable places should be provided for drawing water, not directly from the tank, which should be considered as only the water reservoir,

but connected with it, and made of masonry, as shown in the following sketch:



Wells sunk in clean ground at convenient places, and protected as already described, would supply tank water naturally filtered, and probably there would be no objection to draw the water by iron buckets, chain and windlass in a mixed community.

The municipality should take steps for the protection of all tanks and public wells. This is indeed one of their most important duties. There should always be a separate water-supply provided for low-caste people.

(4) At present the only kind of drainage suitable for small towns is open surface drainage carried along lanes and streets to some convenient outlet.

All covered drains should be avoided. The surfaces of lanes and streets should be graded so as to allow rainwater to pass readily to the surface drain, and the drain should have a shallow watertight section.



The material should be the best and cheapest to be obtained on the spot. Cut stone or concrete or asphalt might be used, or masonry or close fitting vitrified brick; but in any case it is absolutely necessary that the channel should itself be laid true, have a sufficient fall, and that all the joints should be watertight. Open cuts in the earth are of no use, but are on the contrary to be avoided, as leading to a damp unwholesome state of the subsoil.

(5) Where lanes or roadways have a considerable fall, the strong currents produced by tropical rains are apt to injure, or even to ruin, the side drains. This may be avoided by constructing the drains with steps, to break the current.



Surfaces of roads and lanes must, as everywhere, be made of the hardest and cheapest material available. The essential points in small town and village road formation are that the gradients should be properly laid out to drain the road to the side gutters, and that the surface should be carefully kept in repair. Little labour would be required for this purpose in comparison with the outlay necessary for reinstating the road after it has been half ruined by rain and traffic.

Shallow saucer-sectioned surface drains can be kept clean by sweeping or by throwing water into them. With due care in cleansing with fresh water there would be no risk in allowing water used by households for washing and bathing to run into the surface drains.

The surface drains should discharge their contents into open impervious shallow surface sewers, by which the water could be conveyed to a distance

from the town and used at once for irrigating land, and so be finally disposed of.

All household and town impurities are best made use of by being applied to agricultural purposes, and dung-heaps near the town should be avoided.

(6) The general health of small towns may be much improved by removing all useless jungle, by lopping the lower branches of trees so as to improve the external ventilation, and by planting trees on wet or damp ground within or near the town—a measure which dries the ground and purifies the air. Tree-planting along the public roads is also beneficial to health.

(7) Another general town improvement of much importance is the removal of all ruinous dwellings and levelling their sites.

(8) Any foul unwholesome surfaces of ground within the town can readily be improved by covering the area with a few inches of clean earth, which is by far the best disinfectant to use.

11. As already stated, none of the measures proposed above need be expensive. All the materials and labour required are on the spot, and most of the work could be done by the inhabitants of houses themselves; and they ought to be required either to do what is necessary or to pay for the doing of it, on the well understood principle that an unhealthy house is not only dangerous to its own inmates, but to its neighbours, and to the town generally.

If municipalities in small towns see that these measures are carried out to the greatest practicable extent with the means at their disposal, they may confidently expect improved health and less liability to epidemic diseases.

12. But when cholera or fever, or any other epidemic, attacks a town, another duty is placed on the municipal authorities. In a small population there ought to be no difficulty in discovering the houses in which there have been cases of cholera, fever, small-pox, &c.; and whenever it comes to the knowledge of the municipal authorities that the inmates of particular houses have been attacked, immediate inquiry should be made into the sanitary state of the house. It is not safe during epidemics to stir up filth or foul ground, but there is one measure which can be taken with perfect safety—namely, to remove all animals out of the house or compound, and to cover all filth or foul ground, including cesspits, with clean earth, and in every such case the house well should be closed and water brought from outside the town. These two measures, namely, providing good water, and covering all foul matter with earth, can always be adopted with safety and advantage during epidemics; and if any other measure be considered necessary, it ought to be the removal of the people away from the affected house. When the disease has abated, the municipal authorities should proceed to improve the house and compound on the principles already mentioned.

II.

Sanitary Improvement of Villages.

13. There are four agencies by means of which village improvements can be carried out:

(1) The inhabitants,—who ought to be called on to keep their houses, cattle, privies, wells, and village streets free from nuisance.

(2) The village officers,—who might be entrusted with powers to see these things done.

(3) The zemindar or village proprietor,—who ought to be called on to keep his property in a proper condition, especially as regards village work not immediately belonging to houses and compounds, such as the conservancy of village tanks, and the adjustment of their numbers to the wants of the population, filling up all useless collections of water, and all hollows in the ground, levelling the surface, removing ruinous huts, and surface draining the village site, providing new wells, thinning jungle, &c., to improve the external ventilation. The zemindar should, in fact, see that all sanitary work is done which bears

on the health of the village as a whole, as contradistinguished from the steps necessary to keep the house and its appurtenances in a healthy condition.

(4) The Government,—whose sanitary duty in regard to village populations lies in the direction of general drainage works where these are of proved necessity for the district, and irrigation where water for agricultural purposes is deficient.

Village sanitary problems are so various, and are so much influenced by causes outside the houses, that it may be useful to state, as in the preceding paragraphs, the different agencies to be called into action, as these have been indicated in the many reports on this subject which have been received from India.

14. The village officer, where he exists, may help to remove the most important domestic causes of ill-health which afflict the great mass of the people in India. He might take the following steps, and in some way authority might be given him for this purpose. He should see that all the village streets and lanes are kept clean and free of nuisance, that no filth or foul matter is thrown on the surface, and that no one is permitted to perform the offices of nature in any village street, lane, or open space.

He should set apart some area of ground to leeward of the houses to which all filth is to be taken. He should inform the inhabitants of it, and see that the ground is used for the purpose. He should set apart one or more open spaces to which people may resort for natural purposes, and every person should be required to cover up his own filth, or where it can be done a sweeper should be paid for the purpose, as has been done at Bijnor. The field used for this object should be cropped after it has been sufficiently manured, and another field set apart. All village filth and sweepings are useful for manure, and should be spread over land at the proper season.

Care should be taken that the ground set apart for these purposes is not near any well or tank, or watersource from which drinking water is drawn.

The village officer might possibly be charged with oversight of the compounds and houses, or at all events he might call the attention of the people to the necessity for rigid cleanliness, and for removing cattle outside the compounds; some provision might be made for stalling them outside the village but, at any rate, it would be far safer to have a cattle-pen on some open ground within the village than to keep cattle inside the houses. In such a case the village officer might enforce rigid cleanliness and removal of all manure outside the village. It would be advisable to follow the course which has been adopted in some parts of India—namely, to put up boundary marks round villages within which no deposit of any kind of filth should be allowed.

It follows from what has been said that the most urgent sanitary improvement for Indian villages is one that need cost nothing. It is simply cleanliness in which every inhabitant should lend his assistance; but in the case of those who would prefer to pay rather than to do their own cleansing, the expense would be very small.

15. Next in importance to cleanliness is the protection of water sources; and a very simple rule of judging of the need of this can be applied by any one. It is this, to examine the ground about the well or tank. If the ground is foul and filth-sodden, no well dug in it can yield good water, and no tank is safe unless the margins are raised to prevent surface filth being washed into the tank during the rains. If in any house or compound there is a cesspit, together with a well or tank, both should be filled up. It may be taken for granted that the cesspit has so fouled the subsoil, that no good water can be got from it; and besides this, no cesspit or dung-heap should be permitted within the boundary of any house. Unless the inhabitants resort to the fields, the whole house filth should be removed daily in a portable vessel.

The safest course to take where wells are the source of the water-supply, and where they have been dug in fouled ground, is to provide a new well; probably one for the whole village might be sufficient. It should be dug in clean

ground, away from all nuisance. The subsoil water should be cut off from it by casing the well outside with concrete to a depth of 8 or 10 feet from the ground level. The tube of the well should be raised two feet above the ground, and the surface should be sloped away from the well, and paved or covered with concrete, so as to carry away all waste water. Probably the best way of drawing water would be by a windlass and iron bucket and chain, and some kind of cover should be used to keep leaves out of the well. As already stated, there should be wells for low-caste people.

Where village water is obtained from tanks, it is most important to keep one tank solely for drinking and cooking water. It should be specially protected, and never used either for bathing, washing clothes, or watering animals. Tank water can always be filtered by digging a well at a short distance from the tank.

Improved water-supply for an entire village ought to be undertaken by the proprietor, because the people have not the means of doing the work.

16. It may be repeated here that the general measures required for the whole village, and which in default of other means should be done for the people by the zemindar, are village water-supply as described, surface improvements, such as levelling ground, filling up useless tanks and holes, surface drainage, removing jungle, removing ruinous huts, &c.

These improvements would cost very little in comparison to the gain in health among the people.

17. The measures in which Government might aid have been already stated, but it may be further suggested that the Vaccination Officers might be charged by Government with the duty of instructing both village officers and people in these matters. Civil Surgeons could also render efficient aid; and all should be done under the general supervision of the Sanitary Commissioner of the Government, who would also decide the precise nature of the responsibilities resting on the village proprietors.

19th March, 1879.

A. P. MACDONNELL,
Secretary to the Government of India.

GOVERNMENT OF INDIA.
DEPARTMENT OF FINANCE AND COMMERCE.

PENSIONS AND GRATUITIES.

Special pensions to Chief and Superintending Engineers.

No. 4047, dated Simla, the 24th July, 1887.

RESOLUTION—By the Government of India, Department of Finance and Commerce.

Read—

Paragraph 2 of Resolution by the Government of India in this Department, No. 449, dated 18th April 1884.

Despatch to Her Majesty's Secretary of State for India, No. 16-P.W., dated 20th March 1888.

Despatch from Her Majesty's Secretary of State for India, No. 21-P.W., dated 17th May 1888.

By the Resolution in this Department of the 18th April 1884, special additional pensions of Rs. 2,000 and Rs. 1,000 respectively were authorised as rewards for approved service for Civil Engineers who might render three years' service as Chief Engineer or as Superintending Engineer. It was not, however, decided whether the service qualifying for these special pensions must be substantive service, or whether periods of temporary service might be included. On this question being raised, the opinions of selected officers were obtained and submitted to the Government of India, and after consideration of them, and in accordance with the principle laid down in the Civil Pension Code that two officers cannot count service for pension at one time in the same appointment, the Secretary of State was requested to allow active service, both substantive and temporary, to count as service qualifying for these special pensions, periods of furlough being excluded.

RESOLUTION.—This proposal has been sanctioned by Her Majesty's Secretary of State for India. In future, therefore, all service, whether temporary or substantive, will count as service towards the extra pensions, but periods passed on leave, other than privilege leave, will be excluded.

Periods of three months and under, during which an officer merely officiates as a purely temporary measure, will not count.

2. It is important, however, to bear in mind that these extra pensions cannot be claimed as a matter of right, but that they will only be granted, at the discretion of the Government of India, as rewards of approved services.

ORDER.—Ordered, that a copy of this Resolution be forwarded* to the Public Works Department for information and guidance, and that the Resolution be published in the Supplement to the *Gazette of India*.

* Original papers returned.

E. J. SINKINSON,
Offg. Secretary to the Government of India.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending 8 a.m. on
Monday, July 23rd, 1888.**

The strongly marked cyclonic conditions which prevailed over nearly the whole of India at the close of last week continued uninterruptedly during the week under review. The average barometric difference between the Ceylon stations and those of the Punjab was $0.546''$, a difference which is fully equal to the average of this month. Accompanying this difference was a strong and steady monsoon current all along the West Coast, but particularly between the stations of Kurrachee and Ratnagiri. These winds extended as westerly winds right across the Peninsula, and as south-westerly winds spread across Guzerat, Rajputana, &c., into Upper India. They brought fairly heavy and general rain to the regions over which they passed, and conditions over the whole of Western and Northern India during the week were such as usually characterise a strong burst of monsoon winds from the Arabian Sea.

On the Bengal side of India the monsoon current has at times been equally strong, but has been less steady, owing to the formation of a small cyclonic storm at the head of the Bay. The first indication of this disturbance was given by the rainfall at False Point, where 5 inches of rain was reported on the morning of the 17th. On the following day the wind had shifted to north-west at Saugor Island, and the depression during the 18th and 19th developed off the Sunderbans. The storm subsequently passed inland on a west-north-westerly course, reaching Benares by the morning of the 21st and Allahabad on the 22nd, where it was apparently breaking up. The heaviest rainfall connected with the depression occurred during its formation, the amounts recorded as it travelled inland having been everywhere slight. The depression was followed by a burst of very strong winds at the head of the Bay.

In Upper India the rainfall has been general, and on the 22nd much needed rain was reported from Multan and Dera Ismail Khan. The temperature in the Punjab has been on the whole lower than it was last week, though on the 19th maxima of 115° were reported from Dera Ismail Khan and of 110° from Sialkote and Rawalpindi.

The Chart of the 16th showed that the depression which was reported from the neighbourhood of Nowgong in last week's Summary had filled up, and that the barometer had risen over the central parts of the country and over the Peninsula. At the same time a brisk fall had taken place over the Indus Valley, and gradients were consequently increasing over India. A strong monsoon current was blowing on the West Coast, south of Surat, but at the head of the Bay the winds were a trifle below their normal strength. Temperature had fallen in Guzerat, Central India, Sind, and Rajputana; increased generally elsewhere. General, and in places heavy, rain fell over Sind, Rajputana, Kathiawar, &c. The Bombay current gave rain to the West Coast districts and the Central parts of the country, but over the regions fed by the Bay of Bengal monsoon the weather was only showery. On the morning of the 17th the barometer was falling almost everywhere—most in the Punjab—and gradients were becoming steeper over the Bay and the Peninsula. The winds had not altered much. Temperature had increased especially in Upper India, and the air was generally drier. Rain had fallen, except in the east of the Peninsula and in Upper India. False Point reported 5 inches and Hyderabad $2\frac{1}{2}$ inches, but elsewhere the falls were moderate. The Chart of the 18th showed a further fall of the barometer over Northern and Central India, and a rise over the Peninsula, so that there had occurred a considerable increase in the steepness of the gradients. Winds had

also risen except over Northern India, and at the head of the Bay, where they were light and irregular. Temperature had fallen, except in the Punjab and Sind, where high maximum temperatures were still reported. The rainfall was generally similar to that reported on the 17th. None fell in the Punjab or west of the North-Western Provinces, but elsewhere fairly general but moderate amounts were reported. On the 19th a depression had formed at the head of the Bay and very steep gradients prevailed over the Bay, as well as between the West Coast and the Punjab. A well marked cyclonic circulation existed around the storm at the head of the Bay, and a strong monsoon was blowing across the West Coast and spreading into Central and Upper India. Rain has again been fairly general, except in the Punjab and the east of the Peninsula. It had fallen moderately in Burma and heavily in parts of the North-Western Provinces. The Chart of the 20th showed that the Bengal depression had travelled slowly to North-West and that its centre lay near Burdwan. The barometer had fallen a little within the storm area, but had risen elsewhere—more especially in the Punjab. Gradients were consequently rather steeper over the Bay, while they were somewhat slighter over Western India. The cyclonic circulation around the Bengal storm continued, and a strong monsoon current was blowing across the West Coast and into Central and Upper India. Rain was fairly heavy in Burma; moderate but general elsewhere. At one or two places in the North-Western Provinces rather heavy falls were again reported. The depression had reached Benares by the morning of the 21st, and a strong southerly wind was blowing from the Bay into Bengal. A strong monsoon held on the western side of India, and the rainfall was general and fairly heavy. In the North-West Himalayas the falls were large, varying between 1 and 7 inches. By the morning of Sunday the 22nd the centre of the depression had reached Allahabad, but the disturbance was filling up. Both monsoon currents continued, however, to blow strongly, and rain was very general. Heavy falls were reported from Multan and Dera Ismail Khan, where rain was much needed. Temperature changes had been irregular, but the sky was very cloudy and the amount of moisture in the atmosphere large.

The rainfall returns show that, except in parts of Madras and perhaps in some districts in Sind, rain has fallen during the past week in all districts of India. The Punjab has received several good falls, more especially in the sub-montane districts, and the deficiency in Orissa has been lessened by the heavy falls which accompanied the formation of the small storm on the 17th and 18th. In Tenasserim the average rainfall was about 2 inches and in Lower and Central Burma about 1 inch a day. In Upper Burma the amounts were of course lighter, but Kyaukpau received 11 and Bhamo 6 inches. In East Bengal, Deltaic Bengal, and Assam the rainfall was comparatively slight, though general and of almost daily occurrence. At Cherrapunji only $10\frac{1}{2}$ inches were recorded. Central and Northern Bengal had larger amounts, the heaviest being Jalpaiguri, with $11\frac{1}{2}$ inches. The Orissa average was above the normal, and the same is true of Chota Nagpur, though there were no very heavy amounts in these districts. Behar, the North-Western Provinces and Oudh, all received very good rains, with heavy amounts in some places. The south of the Punjab had rather scattered rainfall, and the amounts were not large, except at Fatehabad, where 4 inches was collected. The central and submontane districts received more than their average, but in the north-west and west of that Province the rainfall, though general, was short of the normal amount. In the south of the Peninsula the rain was by no means heavy, but the Konkan had heavy, and the Deccan, Khandeish, the Berars, and Central Provinces fair rain. Rajputana had less than the normal, and the same is true of the whole of the Madras Presidency. The final table shows that 23 out of the 49 divisions had more than the usual amount of rain during the past week, and that out of the 26 divisions exhibiting a defect, the deficiency in 11 of them was less than half an inch.

The seasonal returns show that there is still a deficiency over the greater part of India, the recent rainfall not having been sufficiently heavy to compensate for the long break which occurred in part of June and July. The deficiency is still considerable in Orissa, the south and west of the Punjab, Rajputana, and part of Madras. The greatest excess is in Tenasserim.

Province.	Division.	RAINFALL DATA FOR WEEK ENDING 23RD JULY.			RAINFALL DATA FROM 14TH MAY TO 23RD JULY.		
		Average actual rainfall of division.	Average normal rainfall of division.	Excess or defect, in inches.	Average actual rainfall of season to date.	Average normal rainfall, 14th May to 23rd July.	Excess or de- fect of (season- al) rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	%
BURMAH	Tenasserim	14.75	11.70	+3.05	109.14	64.72	+ 69
	Lower Burma	5.80	5.30	+0.50	35.49	42.42	- 16
	Central do.	3.76	3.86	-0.10	31.85	33.42	- 5
	Upper do.	3.06	?	?	23.40	?	?
	Arakan	9.63	10.88	-1.25	80.83	94.27	- 14
BENGAL AND ASSAM...	Eastern Bengal	1.31	4.14	-2.83	23.70	38.38	- 38
	Assam (Surma)	3.46	4.92	-1.46	68.98	54.19	+ 27
	Do. (Brahmaputra)	4.06	3.53	+0.53	32.78	36.57	- 14
	Deltaic Bengal	1.81	2.45	-0.64	16.16	21.90	- 26
	Central do.	1.84	2.20	-0.36	15.81	21.26	- 25
	North do.	5.84	4.30	+1.54	41.12	46.83	- 12
	Orissa	3.61	2.73	+0.88	10.83	10.83	- 45
	Chota Nagpur	5.72	3.09	+2.63	16.40	18.98	- 13
	Behar (South)	3.26	2.31	+0.95	11.56	14.77	- 22
	Do. (North)	3.50	2.42	+1.08	17.05	18.74	- 6
NORTH-WESTERN PROVINCES AND ODH.	North-Western Provinces (East).	4.37	2.35	+2.02	10.73	12.62	- 15
	Oudh (South)	3.11	2.14	+0.97	11.68	12.07	- 3
	Do. (North)	4.73	2.18	+2.55	13.75	14.98	- 8
	North-Western Provinces (Central).	4.35	2.24	+2.11	15.77	9.92	+ 59
	North-Western Provinces (West).	3.61	2.63	+0.98	9.54	10.92	- 13
	North-Western Provinces (Submontane).	5.34	2.70	+2.64	16.26	14.61	+ 11
PUNJAB	Punjab (South)	1.02	1.14	-0.12	3.35	5.65	- 41
	Do. (Central)	2.00	1.70	+0.30	6.33	9.46	- 33
	Do. (Submontane)	2.44	1.91	+0.53	9.68	10.01	- 3
	Do. (Hill Districts)	5.72	4.79	+0.93	15.42	13.28	+ 16
	Do. (North-West)	0.86	1.57	-0.71	2.73	6.86	- 60
	Do. (West)	0.83	0.57	+0.26	1.90	2.83	- 33
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS).	Malabar	6.90	6.61	+0.29	80.79	68.25	+ 18
	Madras (South Central)	0.60	0.72	-0.12	11.51	6.62	+ 74
	Coorg	6.55	8.43	-1.88	58.91	64.71	- 9
	Mysore	0.37	0.75	-0.38	3.02	9.49	- 68
	Konkan	10.88	8.34	+2.54	70.06	54.75	+ 28
	Bombay, Deccan	2.45	2.49	-0.04	13.98	13.74	+ 2
	Hyderabad (North)	...	...	...	...	...	...
CENTRAL PROVINCES AND BERARS.	Khandeish	0.90	1.16	-0.26	8.52	10.37	- 18
	Berars	2.19	2.22	-0.03	17.59	14.66	+ 20
	Central Provinces (West)	2.40	2.90	-0.50	17.83	17.26	+ 3
	Do. (Central)	4.40	4.28	+0.12	17.78	21.74	- 18
BOMBAY (NORTH) ...	Do. (East)	4.78	4.33	+0.45	14.99	20.10	- 25
	Guzerat	1.65	2.86	-1.21	10.59	16.06	- 38
	Kathiawar	1.34	1.67	-0.33	8.24	7.88	+ 5
	Sind	0.11	0.60	-0.55	7.029	1.17	- 75
RAJPUTANA AND CEN- TRAL INDIA.	Central India (East)	2.21	2.05	-0.74	9.94	10.55	- 6
	Rajputana (East), Central India (West).	1.37	2.27	-0.90	5.33	8.83	- 40
	Rajputana (West)	0.55	1.16	-0.61	7.094	4.46	- 79
MADRAS	East Coast (North)	0.84	1.55	-0.71	7.47	11.33	- 34
	Hyderabad (South)	0.26	1.81	-1.55	12.99	9.70	+ 34
	Madras (Central)	0.31	0.86	-0.55	4.31	6.50	- 34
	East Coast (Central)	1.83	0.79	+1.04	8.65	6.78	+ 28
	Do. (South)	0.32	0.59	-0.27	3.32	4.72	- 30
	Madras (South)	0	0.13	-0.13	1.90	2.76	- 31

W. L. DALLAS,

SIMLA, 26th July, 1888.

for Offg. Meteorological Reporter to the
Government of India.

E. C. BUCK,

Secretary to the Government of India.

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GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

Weekly Report on the State of the Season and Prospects of the Crops.

Madras.—*For week ending 21st July, 1888.*—Rainfall good on the West Coast, fair in Northern districts, none in Tanjore, Trichinopoly, Madura, and Tinnevely, and slight elsewhere. Crops generally good, but withering in Madura, Salem, Anantapur, and South Arcot. Want of rain greatly felt in these districts and parts of Trichinopoly, Tinnevely, Coimbatore, and Bellary. Pasture very scanty in Madura and insufficient in Trichinopoly, North Arcot, Tinnevely, and Salem. Agricultural operations progressing fairly. Prices are generally rising where not stationary. General prospects fair.

Bombay.—*For week ending 25th July, 1888.*—Rain in all districts of the Presidency proper and Sind, but insufficient in parts of Kaira, Broach, Panch Mahals, Baroda, Nasik, Poona, Ahmednagar, Sholapur, Satara, Bijapur, Belgaum, and Dharwar. Sowing of early crops progressing generally, but retarded where rainfall is insufficient. Transplanting progressing in Ahmedabad, Baroda, Nasik, and Konkan. Young crops injured by caterpillars in parts of Kaira, Panch Mahals, and Upper Sind Frontier; good elsewhere. Fodder scarce in parts of Hyderabad, Broach, Nasik, Belgaum, and Baroda.

Bengal.—*For week ending 24th July, 1888.*—Rainfall has been general all over the Province during the week. In Orissa rain has come just in time to save the crops, though in the Khurda subdivision of the Puri district scarcity is apprehended. More rain is still required in many districts for the cultivation of late rice; but the condition of early rice, jute, and sugarcane is generally good. In Behar *bhadoi* prospects are favourable. Early rice and jute are being harvested in North and East Bengal. Indigo manufacture proceeding. No marked fluctuation in the price of rice observable during the past fortnight.

North-Western Provinces and Oudh.—*For week ending 25th July, 1888.*—Good rain has fallen everywhere, and *kharif* operations are in full progress. Supplies of food-grains are sufficient, but prices in a few districts still show a tendency to rise. The condition of cattle is good.

Punjab.—*For week ending 25th July, 1888.*—Rain has fallen in almost all parts of the Province. Prices are somewhat unsettled; a rise is reported from Jullundur and Lahore districts; in others the prices are falling or stationary. Ploughings and sowings for *kharif* crops are in progress. More rain wanted in Hissar and Lahore. *Kharif* crops in fair condition. No damage done to crops. Condition of cattle is good. Fodder generally sufficient, but scarce in some districts.

Central Provinces.—*For week ending 25th July, 1888.*—Weather seasonable. Sowings continue. Rice being transplanted. Weeding commenced. *Jowari*, rice, cotton, and sugarcane thriving.

Burma.—*For week ending 21st July, 1888.*—Ploughing and sowing continue, except in the Lower Chindwin district, where no progress is made for want of rain, and in Tharrawaddy ploughing is late for the same reason. The rainfall has also been insufficient in Thayetmyo, in Lower Burma, and Mandalay, Yeu, Sagaing, Kyauksee, Pagan, parts of Minbu, Meiktila, and Yamethin districts of Upper Burma. The price of fodder has risen in Pegu in Lower Burma, and in Yeu in Upper Burma, and fallen in Toungoo in Lower Burma and in Kyauksee in Upper Burma; elsewhere prices are stationary.

Assam.—*For week ending 25th July, 1888.*—Weather seasonable. Reaping of early and transplanting of late rice still continue. Prospects of crops in general good. Tea backward in Lakhimpur.

Mysore and Coorg.—*For week ending 25th July, 1888.*—Rainfall good in parts of Shimoga, Kadur, and Hassan districts, and in the civil and military station. Standing crops generally in good condition, except in parts where more rain is much needed. Eleusine corocana (Ragee) is reported to be damaged by heavy rain in one taluk of the Shimoga district, and areca nut in another taluk of the same district. Sowing operations in progress. Outturn of crops fair.

Good rain in Coorg during the week. Standing crops promising.

Berar and Hyderabad.—*For week ending 25th July, 1888.*—Rainfall sufficient. Sowing of *jowari* is in progress, but has stopped in Amraoti district on account of heavy rain. Agricultural stock generally in good condition. Fodder sufficient, except in Amraoti district. No marked change in prices of food-grains.

Slight rain in Hyderabad during the week. Agricultural prospects fair. Prices stationary.

Central India.—*For week ending 25th July, 1888.*—Good rainfall throughout the Agency during the week. Agricultural operations in progress. Standing crops and probable outturn of harvest fairly good, except in Western Malwa and Goona. Condition of agricultural stock fair in Bhopawar. Great scarcity of fodder in Neemuch, and indifferent in Western Malwa; elsewhere fairly good. Prices high in Western Malwa, and rising in Baghelkhand.

Rajputana.—*For week ending 25th July, 1888.*—Rainfall light, but general. Agricultural operations progressing generally. Agricultural stock good. Fodder scarce in some places. Prices steady generally.

Nepal.—*For week ending 19th July, 1888.*—Good rains. Weather cooler owing to recent fall of rain. Transplanting of winter rice being pushed on. Prospects fair.

E. C. BUCK,

Secretary to the Government of India.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
RAILWAY TRAFFIC.

No. XIII. OF 1888-89.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used as far as possible.

N.B.—As regards the figures in column Total Receipts from 1st April to 2nd July, 1887, see page 10.														
Latest Return received.	RAILWAYS.	Total length open.	RECEIPTS FOR WEEK ENDING 2ND JULY, 1887 (₹).		Total length open.	RECEIPTS FOR WEEK ENDING 30TH JUNE, 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 2ND JULY, 1887 (₹).		TOTAL RECEIPTS FROM 1ST APRIL TO 30TH JUNE, 1888.		Total increase 1888-89.	Total decrease 1888-89.	
			Total.	Per mile open.		Total.	Per mile open.	Total.	Per mile open per week.	Total.	Per mile open per week.			
			Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
<i>State Lines worked by Companies.</i>														
14th July, 1888	East Indian	1,519	7,57,335	498	1,514	8,22,241	543	1,26,33,194	626	1,19,32,926	606	...	7,00,268	
14th ditto	Rajputana-Malwa (a)	1,664	3,63,202	218	1,664	3,66,000	220	49,32,502	223	51,97,207	240	2,64,705	...	
14th ditto	Sindia	75	6,544	87	75	7,550	101	1,15,996	116	1,05,594	109	...	10,402	
14th ditto	Patna-Gya	57	8,361	147	57	8,951	156	1,21,609	160	1,15,894	156	...	5,715	
7th ditto	Bengal-Nagpur (b)	186	13,185	71	186	39,908	214	5,12,582	207	5,14,632	213	2,050	...	
14th ditto	Dildarnagar-Ghaziapur	12	718	59	12	786	65	14,810	93	15,839	102	1,029	...	
7th ditto	Mysore	140	9,569	68	140	10,592	76	1,30,732	70	1,35,189	75	4,437	...	
14th ditto	Southern Mahratta (c)	675	69,824	103	850	74,383	88	8,43,283	101	10,75,844	97	2,32,561	...	
30th June, 1888	Indian Midland	42	669	16	136	27,577	203	48,373	87	2,35,059	133	1,86,686	...	
7th ditto	Cuddapah-Nellore	...	...	...	...	11,157	134	...	...	64,489	60	64,489	...
7th ditto	Bareilly-Pilibhet	36	1,589	44	36	1,619	45	26,930	56	22,321	48	...	4,609	
7th ditto	Lucknow-Sitapur-Sihramau	85	4,373	51	105	4,609	44	58,106	54	73,090	54	14,984	...	
	TOTAL	4,491	12,35,369	275	4,858	13,75,379	283	1,94,38,137	333	1,94,88,084	308	49,947	...	
<i>State Lines worked by Government.</i>														
14th July, 1888	North-Western (d)	2,094	3,75,938	180	2,411	4,47,900	186	57,29,342	206	64,51,212	206	7,21,870	...	
7th ditto	Wardha Coal	45	13,236	294	45	14,427	321	2,15,271	360	1,98,770	340	...	16,500	
7th ditto	Bengal Central	125	15,561	124	125	12,982	104	1,79,235	108	1,60,860	99	...	18,375	
7th ditto	Eastern Bengal Railways (e)	645	1,54,285	239	672	1,68,518	251	18,81,775	220	19,03,068	217	21,293	...	
14th ditto	Nalhati	27	2,093	78	27	1,773	65	23,841	65	24,957	71	1,116	...	
7th ditto	Tirhoot	249	33,695	135	259	30,868	119	4,63,686	140	4,79,199	142	15,513	...	
30th June, 1888	Burma	333	48,477	145	392	48,332	123	8,13,952	184	8,22,720	169	8,768	...	
7th ditto	Jorhat	26	1,086	42	25	870	34	12,193	35	13,626	36	1,433	...	
30th June, 1888	Cherra-Companyganj	7	37	5	7	102	14	596	7	1,140	12	544	...	
	TOTAL	3,551	6,44,408	181	3,963	7,25,772	183	93,19,891	197	1,00,55,552	196	7,35,661	...	
<i>Lines worked by Guaranteed Companies.</i>														
7th July, 1888	Madras	831	1,82,965	220	842	1,86,490	221	21,91,119	199	21,38,234	195	...	52,885	
7th ditto	South Indian	654	1,22,927	188	654	1,24,974	191	13,67,850	157	14,41,808	170	73,958	...	
7th ditto	Great Indian Peninsula	1,497	6,09,493	407	1,497	5,82,941	389	1,38,78,896	698	1,36,44,398	699	...	2,34,498	
7th ditto	Bombay, Baroda and Central India	461	2,43,033	527	461	1,95,000	423	43,75,096	714	38,17,530	637	...	5,57,566	
7th ditto	Oudh and Rohilkhand	686	1,61,394	235	693	1,16,726	168	19,77,846	217	20,14,995	224	36,249	...	
	TOTAL	4,129	13,19,692	320	4,147	12,05,231	291	2,37,90,807	433	2,30,56,065	428	...	7,34,742	
GRAND TOTAL (GUARANTEED AND STATE)			12,171	31,99,469	263	12,968	33,06,382	255	5,25,48,835	326	5,25,99,701	312	50,866	...
GROSS ESTIMATED EXPENSES			...	...	...	...	...	2,33,47,223	145	2,35,39,959	140	...	...
NET RECEIPTS			...	...	...	...	...	2,92,01,612	181	2,90,59,742	172	...	1,41,870
<i>Assisted Companies.</i>														
7th July, 1888	Bengal and North-Western	376	54,548	145	376	74,060	197	6,84,307	137	7,70,810	158	86,503	...	
14th ditto	Tarakeshwar	22	5,677	258	22	5,584	251	78,799	269	84,307	291	5,508	...	
7th ditto	Rohilkhand-Kumaun	67	6,209	91	67	6,479	97	96,865	109	96,820	111	...	43	
30th June, 1888	Dibru-Sadiya	78	8,864	114	78	8,322	107	1,13,636	110	1,09,099	108	...	4,537	
	TOTAL	543	75,298	139	543	94,445	174	9,73,607	135	10,61,036	150	87,429	...	
<i>Native States.</i>														
7th July, 1888	The Nizam's (Guaranteed Company)	208	51,256	246	277	36,190	131	4,56,614	165	4,02,287	112	...	54,327	
14th ditto	The Gaekwar's	59	2,220	38	59	1,920	33	51,248	65	43,801	57	...	7,447	
14th ditto	The Gaekwar's Meh-sana-Vadnagar	21	616	29	21	800	38	10,582	38	14,725	54	4,143	...	
7th ditto	Bhavnagar-Gondal	193	14,021	73	193	17,441	90	3,63,396	141	3,14,303	125	...	49,093	
7th ditto	Morvi	68	2,262	33	68	2,583	38	51,380	57	59,804	68	8,424	...	
14th ditto	Jodhpore	124	9,172	67	124	8,700	70	1,01,065	61	1,05,364	65	4,299	...	
	TOTAL	673	79,547	118	742	67,634	91	10,34,285	116	9,40,284	97	...	94,001	

(a) Includes the Cawnpore-Achnera State Railway.

(b) Includes the Katni-Umaria State Railway.

(c) Includes the Bellary-Kistna State Railway.

(d) Includes the Amritsar-Pathankot and Rajpura-Patidla State Railways.

(e) Includes the Northern Bengal, Dacca, Kaunia-Dharila and Assam-Bihar State Railways.

(f) Includes adjustments made in the supplementary audited traffic return for June 1887.

SIMLA, 26th July, 1888.

M. C. BRACKENBURY, Major, R.E.,
Under-Secretary.



SUPPLEMENT TO
The Gazette of India.

No. 31.} CALCUTTA, SATURDAY, AUGUST 4, 1888.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.

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GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
Civil Works—Irrigation.

STATEMENTS OF IRRIGATION OPERATIONS IN THE NORTH-WESTERN PROVINCES FOR THE RABI SEASON OF 1887-88 AND FOR THE WHOLE YEAR.

No. A.22—RABI STATEMENT.
PUBLIC WORKS DEPARTMENT, N.W. P. AND OUDH.
IRRIGATION OPERATIONS OF FASL RABI, 1887-88.

Comparative Statement of Irrigation and Rainfall in Canal Districts of the North-Western Provinces.

ZILA.	Area in acres.	Culturable area in acres.	AREAS IRRIGATED.		1887-88 AS COMPARED WITH 1886-87.	RAINFALL FOR SIX MONTHS, OCTOBER TO MARCH, 1887-88.											
						October.		November.		December.		January.		February.		March.	
			Rabi, 1886-87.	Rabi, 1887-88.	Increase. Acres.	Decrease. Acres.	1886.	1887.	1886.	1887.	1886.	1887.	1886.	1887.	1886.	1887.	TOTAL.
Sahāranpur	1,425,920	1,093,101	38,825	39,279	454	...	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
Muzaffarnagar	1,072,000	908,497	90,262	83,976	...	6,286	...	...	...	...	...	...	...	...	...	...	...
Meerut	1,507,840	1,334,209	144,254	118,388	...	25,866	...	...	...	...	...	...	...	...	...	...	...
Bulandshahr	1,214,080	1,084,407	58,926	65,219	6,293	...	...	...	...	...	...	...	...	...	...	...	...
Aligarh	1,251,392	1,041,512	76,416	76,757	341	...	...	...	...	...	...	...	...	...	...	...	...
Muttra	932,480	862,096	26,735	23,663	...	3,072	...	...	...	...	...	...	...	...	...	...	...
Agra	1,187,844	958,205	17,859	18,310	451	...	...	...	...	...	...	...	...	...	...	...	...
Etah	1,112,960	894,829	45,227	43,232	...	1,995	...	...	...	...	...	...	...	...	...	...	...
Mainpuri	1,086,080	764,575	63,400	70,993	7,593	...	...	...	...	...	...	...	...	...	...	...	...
Farukhabad	1,100,160	864,792	25,152	29,811	4,659	...	...	...	...	...	...	...	...	...	...	...	...
Etāwah	1,084,160	795,233	91,824	109,884	18,060	...	...	...	...	...	...	...	...	...	...	...	...
Cawnpore	1,514,368	1,103,465	68,385	115,117	46,732	...	...	...	...	...	...	...	...	...	...	...	...
Delhi	805,120	595,440	186	23	...	163	...	...	...	...	...	...	...	...	...	...	...
Gurgaon	1,240,320	993,280	27,900	25,521	...	2,379	...	...	...	...	...	...	...	...	...	...	...
Dera Dūn	704,544	385,285	6,588	9,098	2,510	...	...	...	...	...	...	...	...	...	...	...	...
Bijnor	1,195,520	1,024,539	2,155	4,143	1,988	...	...	...	...	...	...	...	...	...	...	...	...
Tarāi	590,720	560,856	10,781	11,329	548	...	...	...	...	...	...	...	...	...	...	...	...
Pilibhit	878,720	709,334	5,283	8,184	2,901	...	...	...	...	...	...	...	...	...	...	...	...
Bareilly	1,018,240	911,423	24,018	36,060	12,042	...	...	...	...	...	...	...	...	...	...	...	...
Jhansi	1,002,752	724,553	201	538	337	...	...	...	...	...	...	...	...	...	...	...	...
Hampur	1,464,704	1,230,803	5,929	1,142	721	...	...	...	...	...	...	...	...	...	...	...	...
Jalaun	995,200	777,868	5,929	21,721	15,792	...	...	...	...	...	...	...	...	...	...	...	...
Kumaun Bhābar	(Not known)	(Not known)	56,608	58,938	2,330	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL	24,445,124	19,548,302	888,095	971,326	122,992	39,761	...	...	...	...	...	...	...	...	...	...	...
					TOTAL INCREASE	83,231											...

ALLAHABAD,
The 7th July, 1888.

H. W. CONDUITT,
Asst. Secy. to the Govt., N.W. P. and Oudh, P. W. D.

PUBLIC WORKS DEPARTMENT, N.-W. PROVINCES AND OUDH.
IRRIGATION OPERATIONS OF FASL RABI, 1887-88.
Statement, in Acres, of Crops irrigated in Canal Districts.

No. B. 22—RABI STATEMENT.

NATURE OF CROPS.	Shahjahanpur.	Muzaffarnagar.	Meerut.	Bulandshahr.	Aligarh.	Muttra.	Agra.	Etah.	Mainpuri.	Farukhabad.	Etawah.	Cawnpore.	Delhi.	Gurgaon.	Dehra Dun.	Bijnor.	Tarai.	Pilibhit.	Bareilly.	Jhansi.	Hamirpur.	Jalaun.	Kannun Bhabar.	TOTAL.
Gardens and orchards.	931	631	1,130	531	599	71	93	208	75	24	62	230	...	53	433	...	3	12	62	2	1	1,736	162	7,049
Sugarcane	28	49	66	37	...	...	...	...	...	...	1	...	...	...	...	...	...	1	36	1	...	137	356	...
Wheat	34,070	73,682	93,428	44,458	38,343	4,999	5,061	21,742	35,479	15,367	45,099	47,665	...	5,232	6,553	2,877	8,767	2,475	19,438	219	288	9,381	23,891	538,514
Barley	1,009	879	2,234	3,365	7,409	1,919	1,659	3,266	7,095	9,918	2,560	32,671	...	1,074	407	158	705	1,098	2,519	...	262	...	5,474	85,681
Cereals	...	3	644	60	11	...	1	1	2	...	...	...	...	...	817	...	...	...	...	...	...	...	1,539	...
Oats	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chena	...	...	8	135	757	8	80	398	559	7	109	8	...	1	...	...	...	...	...	2	...	1	10,073	12,146
Other grains	751	2,227	3,969	12,122	26,933	7,786	8,178	15,733	22,888	375	51,952	27,246	23	11,801	...	783	872	3,359	8,363	177	472	4,838	51	210,899
Gram	339	639	1,839	981	1,930	8,493	2,241	701	778	456	2,130	1,449	...	7,134	44	163	372	526	2,722	121	105	874	563	33,700
Peas	13	3,460	11,604	2,168	61	...	377	8	279	387	1,624	2,202	...	...	49	68	...	77	79	...	...	...	100	22,556
Pulses	...	...	1	53	8	...	5	1	2	17	15	1	...	11	...	...	...	36	18	...	...	38	15	221
Arhar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Masur	321	639	557	34	...	...	...	...	...	...	1	...	...	...	142	68	125	227	527	10	...	3	1,621	4,275
Fodder crops	541	226	667	108	8	...	33	5	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,590
Fibres: cotton, &c.	...	38	166	24	8	7	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	249
Dyes: Indigo, &c.	...	...	2	406	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	417
Drugs: Opium, &c.	5	2	10	18	165	3	20	311	2,951	2,957	4,895	1,406	...	10	310	...	11	7	133	...	2	622	484	14,422
Oilseeds	343	144	8	5	...	...	...	...	...	...	...	...	...	...	343	25	439	322	1,704	...	...	41	14,974	18,348
Miscellaneous	928	1,357	2,055	714	1,425	370	562	852	883	303	1,436	2,239	...	203	...	1	35	44	459	7	12	4,186	1,393	19,464
TOTAL RABI, 1887-88	39,279	83,976	118,388	65,219	76,757	23,663	18,310	43,232	70,903	29,811	109,884	115,117	23	25,531	9,098	4,143	11,329	8,184	36,060	538	1,142	21,721	58,938	971,326
TOTAL RABI, 1886-87	38,825	90,262	144,254	58,926	76,416	26,735	17,859	45,227	63,400	25,152	91,824	68,585	186	27,000	6,588	2,155	10,781	5,783	34,018	261	421	5,929	56,608	888,095

H. W. CONDUITT,
Asst. Secy. to Govt., N.-W. P. and Oudh, P. W. D.

ALLAHABAD,
The 7th July, 1888.

PUBLIC WORKS DEPARTMENT, N.-W. PROVINCES AND OUDH.

IRRIGATION OPERATIONS OF THE YEAR 1887-88.

NO. A.22—ANNUAL STATEMENT.

Comparative Statement of Irrigation and Rainfall for the years 1886-87 and 1887-88 in Canal Districts of the North-Western Provinces.

AREA IRRIGATED.				WHOLE YEAR, 1887-88.										RAINFALL.						
ZILA.	Area in acres.	Culturable area in acres.	KHARIF, 1887-88.			RABI, 1887-88.			In comparison with 1886-87.			Percent- age of increase or decrease.	1886-87.	1887-88.	Percent- age of increase or decrease.					
			TOTAL AREA.	In comparison with Kharif, 1886-87.		TOTAL AREA.	In comparison with Rabi, 1886-87.		TOTAL AREA.	In comparison with 1886-87.										
				Increase.	Decrease.		Increase.	Decrease.		Increase.	Decrease.									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Inches.	Inches.	Inches.		
Saharanpur	1,425,920	1,093,101	47,366	1,011	...	39,279	454	...	86,645	1,405	...	+17	380	532	+400	532	...	...
Muzaffarnagar	1,072,000	908,497	77,602	218	...	83,976	...	6,286	161,578	...	6,068	-37	296	285	-37	285	...	...
Meerut	1,507,840	1,334,209	114,599	4,840	...	118,388	...	25,866	232,897	...	21,026	-90	336	275	-181	275	...	...
Bulandshahr	1,214,080	1,084,407	54,520	8,257	...	65,219	6,293	...	119,739	14,550	...	+121	434	345	-205	345	...	...
Aligarh	1,251,392	1,041,512	39,361	7,060	...	76,757	341	...	116,118	7,401	...	+64	367	423	+152	423	...	...
Muttra	932,480	862,096	28,608	1,873	...	23,663	...	3,672	52,361	...	1,199	-23	260	375	+442	375	...	...
Agra	1,187,844	958,205	11,618	...	1,647	18,310	451	...	29,928	...	1,196	-39	202	410	+404	410	...	...
Etah	1,112,960	894,829	22,552	1,834	...	43,232	...	1,995	65,784	...	161	-024	303	326	+75	326	...	...
Mainpuri	1,086,080	764,575	26,502	8,089	...	76,993	7,593	...	97,495	15,682	...	+161	431	352	-183	352	...	...
Farrukhabad	1,100,160	864,792	13,264	2,319	...	29,811	4,659	...	43,075	6,978	...	+162	256	444	+734	444	...	...
Etawah	1,084,160	795,233	48,276	13,142	...	109,884	18,060	...	158,100	31,202	...	+197	340	412	+212	412	...	...
Cawnpore	1,514,368	1,103,495	49,668	15,300	...	115,117	46,532	...	164,785	61,832	...	+375	305	355	+164	355	...	...
Delhi	805,120	525,440	37	...	32	23	...	163	60	...	195	-3250	203	301	+482	301	...	...
Gurgaon	1,240,320	993,280	19,500	7,791	...	25,521	...	2,379	45,081	5,412	...	+120	860	797	+227	797	...	...
Dehra Dún	385,285	385,285	6,300	416	...	9,098	2,510	...	15,398	2,926	...	+190	268	329	+227	329	...	...
Bijnor	764,544	635,285	4,367	2,339	...	1,143	1,988	...	8,510	4,327	...	+508	503	474	-57	474	...	...
Tarái	1,195,520	1,024,539	4,367	...	9,376	11,329	548	...	29,102	...	8,828	-302	566	452	-160	452	...	...
Pilibhit	599,720	560,856	17,863	...	...	15,329	548	...	15,996	3,243	...	+202	360	429	+594	360	...	...
Barilly	878,720	749,334	7,812	...	...	8,184	2,401	...	9,274	...	...	+134	340	542	+594	542	...	...
Benares	1,018,240	911,423	32,982	...	...	36,060	12,042	...	69,042	9,274	...	+485	314	278	+114	278	...	...
Jhansi	1,002,752	724,553	67	17	...	538	277	...	605	294	...	+403	311	447	+437	447	...	...
Hamirpur	1,404,764	1,230,893	282	...	...	1,142	721	...	1,424	703	...	+611	795	710	-107	710	...	...
Jalaun	995,200	777,868	2,290	...	...	21,721	15,792	...	24,011	15,405	...	+22	...	...	...	...	...	...
Kanauji Bhabar	(Not known.)	(Not known.)	25,161	...	431	58,938	...	...	84,999	1,899	...	...	...	...	...	...	...	...
TOTAL	24,445,124	19,548,392	650,597	75,348	14,659	971,326	122,992	39,761	1,621,923	182,593	38,673	+89	...	...	...	...	...	...
			NET INCREASE			NET INCREASE			NET INCREASE			NET INCREASE			NET INCREASE			NET INCREASE		
			60,689			83,231			143,920			H. W. CONDUITT,			Asstt. Secy. to Govt., N.-W. P. and					
												ALLAHABAD,								

ALLAHABAD,
The 7th July, 1888.

H. W. CONDUITT,
Asst. Secy. to Govt., N.-W. P. and
Oudh, P. W. D.

NET INCREASE . . . 60,689 . . . 83,231 . . . 143,920

NET INCREASE . . . 182,593

PUBLIC WORKS DEPARTMENT, N.W. PROVINCES AND OUDH.
IRRIGATION OPERATIONS OF THE YEAR 1887-88.
Statement, in Acres, of Crops irrigated in Canal Districts.

No. B. 22—ANNUAL STATEMENT.

NO. B. 22—ANNUAL STATEMENT.

Statement, in Acres, of Crops irrigated in Canal Districts.

H. W. CONDUIT.

NATURE OF CROPS.	Saharanpur.	Muzaffarnagar.	Meerut.	Bulandshahr.	Aligarh.	Muttra.	Agra.	Etah.	Mainpuri.	Farrukhabad.	Etawah.	Cawnpore.	Delhi.	Gurgaon.	Dehra Dun.	Bijnour.	Tarai.	Pilibhit.	Bareilly.	Jhansi.	Hamirpur.	Jalaun.	Kumaun Bhabar.	Total.		
Gardens and orchards	2,196	1,289	2,140	1,096	1,157	156	193	461	135	63	129	461	...	...	121	767	2	6	25	118	4	1	1,743	425	12,688
Sugarcane	16,954	46,309	7,175	13,086	1,605	795	1,114	4,424	3,932	3,830	7,125	5,270	...	...	1,452	1,293	3,269	791	1,510	9,131	58	249	1,656	345	197,960
Rice	25,730	22,451	10,215	388	574	...	10	194	433	49	158	2,432	...	...	...	4,567	990	17,047	6,854	23,366	2	16	9	19,937	134,822
Bajra	2	2	..	1	21	27	6	15	15	4	20	2	...	...	49	...	...	...	...	...	...	24	...	...	188
Juar	...	...	74	439	615	140	552	260	445	54	340	197	1	1,145	...	...	...	...	...	...	...	...	...	...	4,264
Maize	287	330	1,069	1,824	2,101	64	192	931	1,069	257	594	481	...	63	17	...	...	...	...	...	...	...	...	...	589
Wheat	34,070	73,682	93,428	44,438	38,343	4,999	5,061	21,742	35,479	15,367	45,099	47,665	...	5,232	6,553	2,877	8,767	2,475	19,438	219	288	9,381	23,891	538,514		
Cereals	1,009	879	2,234	3,365	7,409	1,919	1,659	3,266	7,095	9,918	2,560	32,672	...	1,074	407	158	705	1,098	2,519	...	262	...	5,474	85,681		
Barley	...	3	644	60	11	...	1	1	2	...	...	...	...	...	817	...	...	...	...	...	...	...	...	...	1,539
Oats	8	135	757	8	80	398	559	7	109	...	8	10,073	12,146
Chena	...	...	4,284	12,592	27,019	7,897	8,245	16,605	23,773	838	52,571	27,329	23	11,832	...	...	874	872	3,359	8,363	177	481	4,870	2,115	217,574
Other grains	1,161	2,384	1,002	4	87	65	...	...	7	18	...	...	...	60	...	...	...	13	44	...	...	...	...	...	3,108
Pulses (Kharif)	72	611	1,839	981	1,030	8,493	2,241	701	778	456	2,130	1,449	...	7,134	44	163	372	526	2,722	121	105	874	563	33,700		
Gram	339	639	1,839	981	1,030	8,493	2,241	701	778	456	2,130	1,449	...	7,134	44	163	372	526	2,722	121	105	874	563	33,700		
Peas	13	3,460	11,604	2,168	61	...	377	8	279	387	1,624	2,202	...	...	49	68	...	77	79	...	...	...	...	...	22,556
Pulses (Rabi)	1	53	8	...	5	15	1	36	18	15	221
Arhar	...	...	557	34	...	...	...	...	...	...	...	...	...	...	142	68	125	227	527	10	...	...	...	...	4,275
Masur	321	639	557	34	1	7	1,621	4,275
Fodder, crops	797	1,318	5,295	832	30	342	66	7	2	48,886
Fibres: Cotton, &c.	390	1,908	5,899	8,965	5,345	10,419	1,695	1,790	1,305	62	792	206	4	10,076	213,384
Dyes: Indigo, &c.	1,024	2,760	15,047	27,154	27,431	15,958	7,181	13,357	15,637	7,871	35,447	38,112	30	5,938	14,972
Drugs: Opium, &c.	197	52	60	59	170	3	20	335	3,005	3,019	4,912	1,430	...	...	397	...	...	12	7	173	...	...	...	...	18,432
Oilseeds	343	144	8	7	7	74	343	37,802
Miscellaneous	1,740	2,688	3,737	2,038	2,344	1,166	1,230	1,264	3,461	876	4,526	4,869	2	816	...	...	6	56	66	739	12	14	4,309	1,843	37,802
TOTAL YEAR, 1887-88	86,645	161,578	232,897	119,739	116,118	57,361	29,928	65,784	97,495	43,075	158,160	164,785	60	45,021	15,398	8,510	29,192	15,996	60,042	605	1,424	24,011	84,099	1,621,923		
TOTAL YEAR, 1886-87	85,180	167,646	253,923	105,189	108,717	53,560	31,124	65,945	81,813	36,097	126,958	102,953	255	39,609	12,472	4,183	38,020	12,753	59,768	311	721	8,606	82,200	1,478,003		

H. W. CONDUITT,
Asst. Secy. to Govt., N. W. P. and Oudh, P. W. D.

ALLAHABAD,
The 7th July, 1888.

PUBLIC WORKS DEPARTMENT, N.-W. PROVINCES AND OUDH.

IRRIGATION OPERATIONS OF THE YEAR 1887-88.

No. C. 22—ANNUAL STATEMENT.

Statement, in Acres, of Crops irrigated by Canals in Canal Divisions.

NATURE OF CROPS.	UPPER GANGES CANAL.						LOWER GANGES CANAL.						BUNDELKHAND IRRIGATION WORKS.										
	Northern.	Aunpshahr.	Meerut.	Bulandshahr.	Aligarh.	TOTAL.	Narora.	Mainpuri.	Cawnpore.	Etawah.	Bhognipur.	TOTAL.	Agra Canal.	Betwa Canal.	Rohilkhand Canals.	Bijnor Canals.	Dun Canals.	Tara Canals.	Bhabar Canal.	Jhansi Lakes.		Hamirpur Lakes.	GRAND TOTAL.
Gardens and Orchards	1,034	776	998	753	1,770	5,331	150	19	457	104	109	839	459	1,743	149	2	767	...	425	4	1	12,688	
Sugarcane	25,850	29,107	36,300	10,748	3,911	106,006	2,994	1,452	6,880	8,697	2,156	22,179	3,314	1,656	11,349	3,269	1,203	83	345	58	249	197,960	
Rice	20,661	1,733	7,458	643	833	31,238	17	139	276	2,286	309	3,027	6	9	33,750	990	4,567	12,917	19,937	2	16	134,822	
Bajra	4	...	...	...	34	38	4	...	5	17	18	44	...	...	...	...	...	...	...	...	...	188	
Juar	...	94	...	...	973	1,485	20	105	129	592	119	965	...	...	...	...	...	...	...	...	...	4,264	
Maize	...	662	287	1,808	3,161	5,918	39	621	833	666	208	2,307	...	...	...	...	17	...	...	...	...	9,868	
Cereals	44,404	38,778	53,171	33,605	58,636	228,054	11,095	11,075	36,471	59,105	31,569	149,493	72,617	9,466	23,547	2,877	6,553	7,133	23,891	210	272	538,514	
Wheat	546	2,585	213	2,168	11,111	16,623	380	6,122	44,364	588	590	52,044	2,022	4,659	4,009	158	407	313	5,474	...	262	85,681	
Barley	...	...	588	125	9	722	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,539	
Oats	...	...	8	...	1,536	1,544	...	99	30	275	34	438	...	...	...	...	...	...	...	2	...	12,146	
Chena	2,639	9,654	177	4,015	49,305	66,670	1,484	826	425	63,938	34,538	101,211	1,424	27,138	12,594	874	...	...	2,115	177	391	217,574	
Other grains	329	27	109	...	112	577	...	...	...	...	...	...	1,224	125	57	...	...	...	1,649	...	...	3,108	
Pulses (kharif)	338	556	413	1,196	1,697	4,200	65	199	823	1,378	2,218	4,733	1,444	17,833	3,552	163	44	68	563	121	105	33,700	
Gram	...	2,394	9,711	2,027	...	14,132	...	269	1,172	1,036	1,123	4,500	3,174	377	156	68	49	...	100	...	...	22,556	
Pulses (rabi).	...	...	...	8	56	64	1	...	19	9	6	35	...	...	...	...	...	...	15	...	...	221	
Arhar	...	...	...	...	...	...	...	...	...	...	...	...	1,107	...	...	...	...	...	1,621	10	...	4,275	
Masur	210	7	168	59	...	444	...	...	...	...	...	...	3,024	422	...	3	...	...	590	...	...	9,343	
Fodder crops	438	971	3,017	837	24	5,287	...	...	...	...	8	8	3,408	23,015	...	7	2	...	11	...	...	48,886	
Fibres : Cotton, &c.	463	1,426	2,161	8,939	8,121	21,110	246	664	56	1,157	200	2,323	3,408	23,015	...	...	...	...	...	...	2	213,384	
Dyes : Indigo, &c.	981	12,821	8,029	21,319	37,594	80,744	6,353	3,268	28,728	37,999	24,409	100,667	2,984	28,542	353	94	...	...	...	...	...	14,972	
Drugs : Opium, &c.	1	7	25	70	291	394	297	1,158	4,583	5,520	1,033	12,591	262	624	192	...	397	...	484	...	...	18,483	
Oilseeds	56	13	...	...	2	71	...	78	...	...	...	78	431	41	2,465	25	343	...	14,974	...	4	37,802	
Miscellaneous	2,077	1,981	1,502	1,521	3,981	11,162	110	584	3,737	5,439	3,677	13,547	2,021	3,127	861	6	...	...	1,843	5	14	37,802	
TOTAL, 1887-88	100,031	103,572	124,525	90,619	183,157	601,904	23,255	26,678	129,038	189,646	102,325	470,942	176,243	124,657	93,694	8,516	15,398	20,536	84,099	589	1,316	1,621,923	
TOTAL, 1886-87	94,942	94,536	129,101	57,393	168,469	574,441	25,110	22,706	99,742	147,176	64,269	359,003	203,429	122,096	78,554	4,183	12,472	31,987	82,200	309	721	1,478,003	

ALLAHABAD,
The 7th July, 1888.H. W. CONDUITT,
Asstt. Secy. to Govt., N.-W. P. and Oudh, P. W. D.

GOVERNMENT OF
PUBLIC WORKS
Civil Works—

COMPARATIVE STATEMENT OF IRRIGATION AND RAINFALL

Comparative Statement of Irrigation and Rainfall

Number.	Collectorate.	NAME OF WORK.	AREA UNDER COMMAND.		AREA					
			Gross Acres.	Irrigable Acres.	FASL KHARIF, 1887-88.			FASL RABI, 1887-88.		
					Total Acres.	In comparison with 1886-87.		Total Acres.	In comparison with 1886-87.	
						Increase.	Decrease.		Increase.	Decrease.
1	2	3	4	5	6	7	8	9	10	11
1	AHMEDABAD	Hathmati Canal	44,744	28,840	1,355	308	...	1,432	...	248
2		Khari Cut	3,890	3,890	2,410	695	...	3	...	67
3	KHANDESH	Hartala Tank	584	527	142	116	...	107	40	...
4		Mukti Reservoir <i>{ Lower Panjhra River Works }</i>	13,117	12,627	288	...	52	174	...	159
5		Mahasva Tank	4,093	3,912	53	22	...	354	71	...
6		Jamda Canals	46,288	40,185	389	66	...	948	...	92
7	NASIK	Palkhed Canal	28,832	23,466	600	25	...	605	...	114
8		Wadali Canal <i>{ Kadwa River Works }</i>	3,486	2,433	44	...	100	124	57	...
9		Ojhar Tambat Canal	8,055	6,824	99	19	...	107	...	97
10	AHMEDNAGAR.	Ojhar Canal <i>{ Pravara River Works }</i>	23,724	20,088	392	...	67	239	...	127
11		Lakh Canal	29,913	22,760	122	...	61	48	1	...
12		Bhatodi Tank	*15,126	*12,124	579	200	...	623	198	...
13	POONA	Mutha Canals	94,087	49,800	6,243	205	...	1,902	...	911
14		Kasurdi Tank	597	478	86	8	...	64	...	54
15		Matoba Tank	10,700	7,133	731	...	4	116	...	463
16		Shirsuphal Tank	4,500	2,500	383	144	...	388	3	...
17		Bhadalvadi Tank	1,900	1,520	293	125	...	90	15	...

OF INDIA.
DEPARTMENT.
Irrigation.

ON NEW WORKS IN THE DECCAN AND GUJARAT FOR 1887-88.

on Canals in the Deccan and Gujarat for 1887-88.

IRRIGATED.			Percentage of Increase or Decrease.	RAINFALL.		Percentage of Increase or Decrease in 1887-88.	REMARKS.
WHOLE YEAR 1887-88.				1886-87.	1887-88.		
Total Acres.	In comparison with 1886-87.						
	Increase.	Decrease.					
12	13	14	15	16	17	18	19
2,787	60	...	2	K. 28'80 R. 0'41	20'85 1'86	-22	At Parántij.
				T. 29'21	22'71		
2,413	628	...	35	K. 31'88 R. 0'41	24'67 0'97	-20	Rainfall at Ahmedabad.
				T. 32'29	25'64		
249	156	...	167	K. 21'05 R. 11'85	24'21 6'86	-6	
				T. 32'90	31'07		
462	...	211	-31	K. 23'02 R. 5'63	29'39 8'45	28	Rainfall at Mukti Tank.
				T. 29'55	37'84		
407	93	...	30	K. 31'86 R. 7'24	27'43 2'83	-23	
				T. 39'10	30'26		
1,337	...	26	-2	K. 28'14 R. 8'25	25'48 8'49	-6	
				T. 36'39	33'97		
1,205	...	89	-7	K. 31'11 R. 5'91	19'35 9'81	-21	
				T. 37'02	29'16		
168	...	43	-20	K. 14'60 R. 8'84	18'58 8'56	17	At Niphád.
				T. 23'08	27'14		
206	...	78	-27	K. 14'96 R. 9'90	15'19 12'18	10	Rainfall at Ashwi
				T. 24'86	27'37		
631	...	194	-24	K. 17'71 R. 14'38	18'14 15'51	5	
				T. 32'09	33'65		
176	...	60	-26	K. 25'74 R. 16'50	16'25 8'70	-41	* These figures are the result of the survey of the land under the Bhatodi Tank. Figures of rainfall are those of Civil Hospital at Poona. The fall at Uruli at 36th mile of Mutha Right Bank Canal was, in 1886-87, K. 8'01, R. 9'85, T. 17'86; in 1887-88, K. 8'50, R. 4'16, T. 12'66. The rainfall at Kasurdi, the 44th mile, and at Khedgaon, the 61st mile, is given opposite Kasurdi and Matoba Tanks, respectively.
				T. 42'24	24'95		
1,202	398	...	49	K. 17'12 R. 14'39	24'24 7'02	...	
				T. 31'51	31'26		
8,145	...	706	-8	K. 6'97 R. 8'33	9'66 3'95	-11	
				T. 15'30	13'61		
150	...	46	-23	K. 11'97 R. 13'28	13'49 11'00	-3	
				T. 25'25	24'49		
847	...	467	-36	K. 13'53 R. 14'87	13'54 4'37	-37	
				T. 28'40	17'91		
771	147	...	24	K. 18'12 R. 11'50	20'70 3'47	-18	
				T. 29'62	24'17		
383	140	...	58				

Comparative Statement of Irrigation and Rainfall

Number.	Collectorate.	NAME OF WORKS.	AREA UNDER COMMAND.		FASL KHARIF, 1887-88.			FASL RABI, 1887-88.		
			Gross Acres.	Irrigable Acres.	Total Acres.	In comparison with 1886-87.		Total Acres.	In comparison with 1886-87.	
						Increase.	Decrease.		Increase.	Decrease.
1	2	3	4	5	6	7	8	9	10	11
18	POONA	Nira Canal	98,954	84,129*	2,765	1,057	...	2,763	9	...
19	SHOLAPUR	Ekrak Tank	17,152	15,320	1,356	...	174	757	221	...
20		Koregaon Tank	Survey not made.		53	28	...	221	61	...
21		Ashti Tank	17,882	14,476	585	140	...	373	50	...
22	SHOLAPUR AND SATARA.	Mhaswad Tank	25,240*	20,192*	1,717	1,100	...	2,144	1,417	...
23	BIJAPUR	Muchkundi Tank	5,570	3,417	3	...	...	...	...	...
24	SATARA	Revāri Canal	3,813	3,624	207	56	...	547	15	...
25		Yerla Canals	11,234	10,680	587	...	151	574	56	...
26		Pingli Tank	6,786	5,966	538	6	...	486	43	...
27		Gondoli Canal								
		Upper Mān River Works.								
28		Maini Tank	4,876	4,625	739	365	...	337	...	363
29		Chikhli Canal	1,871	1,478	247	47	...	60	6	...
30		Krishna Canal	27,407	25,533	1,507	...	224	1,055	...	339
31	BELGAUM	Gokak Canal, First Section	18,668	16,663	1,355	128	...	727	135	...
32	DHARWAR	Dāmbal Tank	3,955	3,885	33	...	24	25	14	...
33		Madag Tank	2,045	2,024	495	37	...	292	13	...
34		Medleri Tank	1,916	1,052	13	...	89	13	...	21
35		Assundi Tank	1,800	1,800	119	52	...	58	28	...
			5,82,805	4,53,971	26,548	4,003	...	17,756	...	602

on Canals in the Deccan and Gujarat for the Year 1887-88—continued.

WHOLE YEAR 1887-88.			Percentage of Increase or Decrease.	RAINFALL.		Percentage of Increase or Decrease in 1887-88.	REMARKS.
Total Acres.	In comparison with 1886-87.			1886-87.	1887-88.		
	Increase.	Decrease.					
12	13	14	15	16	17	18	19
5,528	1,066	...	24	K. 9'55. R. 14'45. T. 24'00.	15'15. 8'39. 24'14†	...	* The increase in the acreage commanded is due to extension of canal and completion of certain distributaries. † Average for Pimpri, Vadgaon, Pandhara and Baramati.
2,113	47	...	2	K. 21'75. R. 14'39. T. 36'14.	32'91. 5'16. 38'07.	5	
274	89	...	48	K. 36'32. R. 10'21. T. 46'53.	29'30. 2'32. 31'62.	-32	
958	190	...	25	K. 22'34. R. 8'51. T. 30'85.	16'88. 5'18. 22'06.	-28	* The land under command of Canal No. 2 has not been surveyed, and the areas are the same as those shown in the last year's return, being areas under Canal No. 1.
3,861	2,517	...	187	K. 16'94. R. 14'76. T. 31'70†	16'22. 6'60. 22'82†	-28	† Average of Rajewadi and Khatphal.
3	...	...	...	K. 13'08. R. 8'06. T. 21'14.	13'18. 9'64. 22'82.	8	
754	71	...	10	K. 15'15. R. 10'55. T. 25'70.	25'33. 8'30. 33'63.	31	
1,161	...	95	-8	K. 17'46. R. 16'95. T. 34'41.	22'65. 8'33. 30'98.	-9	
1,044	49	...	5	K. 9'78. R. 11'78. T. 21'56.	14'05. 12'19. 26'24.	21	Pingli rainfall.
1,076	2	...	...	K. 11'26. R. 9'79. T. 21'05.	14'65. 11'49. 26'14.	24	Gondoli do.
307	53	...	21	K. 13'24. R. 14'60. T. 27'84.	13'41. 7'83. 21'24.	-24	
2,562	...	563	-18	K. 18'70. R. 7'40. T. 26'10.	16'26. 5'74. 22'00.	-16	
2,082	263	...	14	K. 13'19. R. 9'95. T. 23'14.	20'87. 10'68. 31'55.	36	
58	...	10	-14	K. 19'06. R. 12'92. T. 31'98.	12'25. 10'87. 23'12.	-28	
787	50	...	7	K. 11'15. R. 5'31. T. 16'46.	8'50. 8'70. 17'20.	4	
26	...	110	-81	K. 17'86. R. 6'96. T. 24'82.	12'63. 12'31. 24'94.	...	
117	80	...	82	K. 10'53. R. 7'88. T. 18'41.	7'95. 7'96. 15'91.	-14	
44,304	3,401	...	8				

NOTE.—Figures in block in columns 15 and 18 show percentage of decrease.

J. E. WHITING, C.E.,
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